5-2013

Theoretical Underpinnings of Jury Decision Making in Excuse Defense Cases

Christopher Sean Peters
University of Arkansas, Fayetteville

Follow this and additional works at: http://scholarworks.uark.edu/etd
Part of the Applied Behavior Analysis Commons, and the Criminology and Criminal Justice Commons

Recommended Citation
http://scholarworks.uark.edu/etd/741

This Dissertation is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.
Theoretical Underpinnings of Jury Decision Making in Excuse Defense Cases
Theoretical Underpinnings of Jury Decision Making in Excuse Defense Cases

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Psychology

By

Christopher Sean Peters
University of North Texas
Bachelor of Arts in Psychology, 2004
Western Carolina University
Master of Arts in Clinical Psychology, 2007

May 2013
University of Arkansas
ABSTRACT

In the typical criminal trial, a defendant is trying to prove he/she is not guilty because they were not the individual that committed the crime. However, another type of defense exists in which the defendant admits they were the culprit, but provides an excuse in an attempt to avoid criminal punishment. These so called “excuse defenses” include insanity, involuntary intoxication, age, and entrapment. In all cases, juries are required to determine whether the defendant had sufficient mental capacity to form the intent to commit the crime. Although jury decision making is a popular research area in psychology, relatively little has been done to examine excuse defenses. In the following paper, three theoretical areas were discussed in relation to excuse defenses: excuses in interpersonal relationships, the traditional jury decision making Story Model, and social Attribution Theory. A combined theory designed to specifically explain jury decision making in excuse defense cases was postulated and two experiments were performed to test this theory. In Experiment 1, participants read a trial summary in which the type of excuse defense and aspects of Attribution Theory were varied. Experiment 1 found weak support for the importance of Attribution Theory in jury decision making. The strongest predictor of participants’ verdicts was the Crime Control versus Due Process Orientation. Conclusions based on Experiment 1 should be limited however due to a significant number of participant problems. Experiment 2 utilized a card selection task in which participants chose which evidence they wished to view. Experiment 2 found strong support that Attribution Theory plays an important part in jury decision making and that the importance of evidence changes depending on the type of excuse defense used. For Entrapment, Consensus and Distinctiveness are both important, however, for Brain Damage, Distinctiveness evidence takes priority.
proposed theory was discussed with regard to the evidence provided in the current experiments and implications for individuals working in the legal system were suggested.
This dissertation is approved for recommendation to the Graduate Council.

Dissertation Director:

______________________________
Dr. James Michael Lampinen

Dissertation Committee:

______________________________
Dr. David A. Schroeder

______________________________
Dr. Scott Eidelman
DISSERTATION DUPLICATION RELEASE

I hereby authorize the University of Arkansas Libraries to duplicate this dissertation when needed for research and/or scholarship.

Agreed

__________________________________________________

Christopher Sean Peters

Refused

__________________________________________________

Christopher Sean Peters
ACKNOWLEDGMENTS

Special thanks to my dissertation chair Dr. James Lampinen, and my committee members Dr. David Schroeder and Dr. Scott Eidelman for their help and guidance through this process. Also thanks to my lab mates and my army of research assistants without whom this dissertation could have never been finished.
DEDICATION

This dissertation is dedicated to my father, who has always stood behind me and to my late mother, gone now but never forgotten.
# TABLE OF CONTENTS

I. Introduction 1
II. Types of Excuse Defenses 3
   A. Insanity 3
   B. Intoxication 6
   C. Age 7
   D. Entrapment 8
   E. Unspecified Excuse Defense 10
III. Excuses in Interpersonal Relationships 11
    A. Views of Excuses in Interpersonal Relationships 12
    B. Application to Excuse Defenses 18
IV. Jury Decision Making Story Model 19
    A. Four Certainty Principles 20
    B. Empirical Evidence 24
    C. Application of the Story Model to Excuse Defenses 28
    D. Weaknesses of the Story Model with Regard to Excuse Defenses 35
V. Attribution Theory 37
    A. History of Attribution Theory 37
    B. Application to Excuse Defenses 44
    C. Empirical Evidence 47
    D. Limitations 51
VI. Comprehensive Theory of Jury Decision Making for Excuse Defenses 51
    A. Similarities Between the Theories 52
    B. A Combined Theory 55
VII. The Current Research 59
VIII. Experiment 1 61
    A. Method 62
       1. Participants 62
       2. Design 62
       3. Materials and procedure 63
    B. Results 65
       1. Manipulation check 66
       2. Absolute verdicts 66
       3. Guilt ratings 67
       4. Confidence 68
       5. Crime Control Due Process Orientation 69
    C. Discussion 70
IX. Experiment 2 73
    A. Method 73
       1. Participants 73
       2. Design 74
       3. Materials and procedure 75
    B. Results 76
       1. Evidence chosen 77
       2. Evidence rankings 78
    C. Discussion 80
**Introduction**

The right to a trial by a jury of your peers is an integral part of the United States Judicial System. The burden of determining the guilt or innocence of a defendant falls squarely on the shoulders of the jury, which, for the most part, is made up of average individuals whose only training consists of instructions provided by the judge at the time of the trial. In a typical criminal trial, a defendant begins with a plea of either guilty or not guilty. If the defendant pleads guilty, he/she acknowledges that he/she committed the offense, and the trial proceeds to the sentencing phase. Meanwhile, if the defendant pleads not guilty, he/she is essentially claiming that he/she did not commit the crime; that the police actually arrested the wrong person. The jury members are presented with evidence by the prosecution meant to convince the jury that the defendant is indeed the individual that committed the crime. They are also presented with evidence by the defense attorneys meant to convince the jury that the defendant could not have been the individual that committed the crime (Mueller & Kirkpatrick, 1995). However, a second type of trial exists in which the defendant pleads neither guilty nor not guilty, but rather offers up an excuse. As a result, this second type of plea is typically referred to as an excuse defense. The goal of this paper is to examine the theory behind how jurors make decisions regarding excuse defenses.

These so called excuse defenses are a bit of a conundrum. In one sense, the defendant is saying “Yes, I committed the crime”, which is in essence an admission of guilt. However, at the same time they are also saying, “But I’m not guilty because of….”. An excuse defense is formally defined as “a defense in which a person states that his or her mental state was so impaired that he or she lacked the capacity to form sufficient intent to be held criminally responsible” (Siegal, 2009, p. 149). Excuse defenses are derived from the difference between the
two common law standards of guilt: actus reus (evil act) and mens rea (evil mind). A defendant is guilty by the standard of actus reus if he or she committed an illegal act. In a typical trial, where an individual is trying to prove that he/she was not the person who committed the crime, they are trying to prove they lacked actus reus. In other words, they did not commit the act, so are not guilty. On the other hand, mens rea stands for whether the guilty individual had the intent to commit the crime. If the defendant lacks intent (or cannot form intent due to impairment) then the individual cannot be said to have had mens rea and, therefore, cannot be found guilty (Siegal, 2009). So in essence, with regard to an excuse defense trial, a juror is not trying to determine whether the defendant committed the crime, but rather if the defendant intended to commit the crime.

It should also be noted that excuse defenses differ from another class of defenses referred to as justification defenses, because excuse defenses focus on the lack of intent to commit the act, rather than the act being justified (Siegal, 2009). In a justification defense, the defense acknowledges that the defendant committed an action that under normal circumstances would be considered criminal. The defendant intended to commit that act, but claims that under the special circumstances that were present at the time, the action was not criminal – it was justified. The classic example of a justification defense is killing someone in self-defense. Note that in an excuse defense, the defense stipulates that the act in question was a wrongful act, but claims that the defendant was not able to comport his/her actions to the requirements of the law because he or she lacked mens rea. In a justification defense, the defense claims that the act in question was not a wrongful act at all, but rather an act that was morally and legally justifiable given the circumstances.
Excuse defenses are also different from standard defenses in that they are part of a special class of defenses referred to as affirmative defenses. In an affirmative defense, the burden of proof shifts from the prosecution to the defense. This means that rather than the prosecution needing to prove above certain standards of proof (i.e. beyond a reasonable doubt) the defense must now prove that the defendant was sufficiently impaired to not have mens rea. As a result, success with excuse defenses can often be difficult to obtain (Brody, Acker, & Logan, 2001). It is important at this point to elucidate upon the legal version of impairment. Impairment of the ability to form mens rea can occur in a number of different ways. There are four officially recognized excuse defenses: insanity, intoxication, age, and entrapment; however, other excuse defenses may be possible if the defendant can prove that something interfered with his/her ability to have mens rea. Each of the primary excuse defenses will now be examined individually (Siegal, 2009).

Types of Excuse Defenses

Insanity

Using the insanity defense (or insanity plea as it is sometimes referred to), occurs when a defendant makes the claim that at the time the crime was committed, due to some form of mental illness, his or her state of mind made it impossible for them to have mens rea. In other words, because of their mental state, they were unable to understand the wrongfulness of their actions. For example, an individual with severe schizophrenia, who strikes his neighbor because he thinks the neighbor is an alien trying to abduct him, could not be found guilty of assault, because at the time of the crime he would have been considered legally insane. If a defendant is successful in pleading insanity, they are typically ruled “Not Guilty By Reason of Insanity” (NGRI). It should be noted, however, that the concept of legal insanity only partially overlaps
with the psychiatric concept of mental illness. Insanity is a legal term specifically related to the defendant’s inability to understand their actions, and as a result, many individuals who would qualify for a diagnosis of mental illness (such as depression) would not qualify for the insanity defense. Instead of simply a psychiatric diagnosis, individuals are deemed legally insane based on certain legal standards such as the M’Naughten Rule or the Substantial Capacity Test (Siegal, 2009). To determine the defendant’s state of mind, an expert forensic psychologist is typically employed to administer a battery of tests to determine the defendant’s capacity to form mens rea.

Because of the attention gained in the press and its relatively close relationship with psychology, the insanity defense has generated the most research attention of all the excuse defenses. Although much of the research involves how forensic psychology experts should determine insanity (i.e. Dror & Rosenthal, 2008), some of the research has actually looked at how juries decide in trials involving the insanity defense. The insanity defense is different from other excuse defenses in that it relies strongly on an expert witness to tell juries whether or not an individual qualifies as insane (Siegal, 2009). This places some of the duty to determine if the defendant is responsible or not in the hands of the forensic psychologist rather than the juror. Although it is of some interest how a jury member makes decisions based on expert testimony (e.g. Rendell, Huss, & Jensen, 2010), that is beyond the focus of this paper. However, some studies regarding the insanity plea have removed the forensic expert from the equation, looking solely at juror decisions in insanity defense trials.

For example, a study by Tezza (1996) examined different predictors of juror verdicts in insanity defense trials. She presented undergrad participants with vignettes created using actual transcripts from cases where a defendant attempted an insanity defense. The vignettes varied in the strength of the evidence presented and the severity of the crime committed. Finally, the
author assessed several dispositional variables and attitudes of the participants. Tezza found that there was an interaction between the ambiguity of the evidence and the severity, where the more severe the crime and more ambiguous the evidence, the less likely the defense was to be successful. She also found, however, that previous negative views towards the insanity defense, an inaccurate understanding of mental illness, and authoritarianism significantly predicted guilty verdicts.

Another study by Louden and Skeem (2007) specifically examined the effects juror attitudes have on their verdicts in insanity defense cases. To accomplish this, the authors presented former jurors with four insanity defense case vignettes that were designed to evoke specific prototypes the jurors may have of the typical insane person. They also assessed each juror’s attitude toward the insanity defense. The authors found that the attitudes of the jurors played a highly significant role in their verdicts. On the same vignettes, individuals who had a favorable view of the insanity defense found the defendant insane 70.88% of the time, compared to individuals with a negative view of the insanity defense who only found the defendant insane 16.67% of the time.

Considering the results of these studies and that the burden of proof in all excuse pleas lies with the defense, it is not surprising that the insanity defense is not used very often. Furthermore, even when the defense is utilized, it has proven to be only marginally effective. The insanity defense is often thought of as being over used and has arguably gained the most attention in pop culture. However, multistate studies have found that the insanity defense was actually used in less than 1% of all trials, and of those 1%, the defense was successful only 26% of the time (Callahan, Steadman, McGreevy, & Robbins, 1991; Pasewark & McGinley, 1985). This study is rather outdated, but there does not appear to have been any attempt made at this
time to examine more current rates. Overall, given its close relationship to psychology, the insanity defense has received a great deal of jury research. As a result, the insanity defense will be frequently referred to later when discussing the potential theories of juror decision making.

**Intoxication**

In an intoxication defense, the defense argues that the defendant was unable to comport their behavior to the requirements of the law because their judgment and reasoning was impaired due to drugs or alcohol. Intoxication is only considered a defense if the defendant was involuntarily or accidentally intoxicated, for example if someone else spiked their drink (Siegal, 2009). There has been some sparse research regarding the involuntary intoxication defense, especially recently with regard to certain side effects with anti-depressants that may cause violence; however, at this time the articles merely speculate an increase in the use of an “SSRI excuse defense” rather than providing empirical evidence (e.g. Myers & Vondruska, 1998). Also of interest regarding intoxication are the effects of long term drug and alcohol usage. Some of the effects of extended usage of a drug could appear similar to symptoms in non-substance related disorders.

For example, a study by Heath, Grannemann, and Thompson (2009) examined juror verdicts in an assault trial where the participant used a more generalized excuse defense. They included variables concerning whether the impairment utilized in the excuse was self inflicted, the victim’s respectability, and the severity of the assault. To test the effect of whether the excuse was self inflicted or not, the authors used two somewhat prominent excuse defenses: Post Traumatic Stress Disorder (PTSD) from a war veteran (a form of insanity plea) and Cocaine Dependency Disorder (CDD) from a former cocaine addict (a loose form of the intoxication defense). Both disorders result in extremely similar symptoms (which were described to the
participants using an identical definition), and according to the authors only differed in how much they were self-inflicted. The authors found that all three variables had a significant impact on participants’ verdicts. In general, participants were more likely to accept the PTSD excuse defense over the CCD defense. The participants also were more likely to find the defendant not guilty when the defendant was more respectable, and the lower the severity of the assault, the more likely the participants were to acquit the defendant. The implications of this study will be discussed in depth later.

Age

Age as an excuse defense is defined based on the concept that children under a certain age are unable to understand that what they did was wrong. For the most part, the age is defined by common law statute which states that children under the age of seven are incapable of understanding the gravity of the situation. Meanwhile, children over the age of 14 are typically thought of as having the ability to discern right from wrong and cannot use age as an excuse defense. There is a gray middle ground area between the age of seven and 14 where the age defense may be used, but is questionable. It is in this range that jurors are placed in a situation where they must decide if the child had the ability to form mens rea, and therefore whether or not they can be found guilty of the crime. Age as an excuse defense may only be used in circumstances in which a minor is being tried in adult court, but it is unclear how often this type of defense is actually utilized (Siegal, 2009). Logically, if the minor lacked the sufficient mental capacity to form mens rea, both the judge and prosecution would not have recommended moving the case to the adult courts in the first place. As a result, to date, there does not seem to be any empirical research on jury decision making on this topic.
Entrapment

Entrapment is a somewhat peculiar excuse defense in that it uses a rather loose version of the term “impairment”. In an entrapment defense, the defendant’s ability to form mens rea is impaired because of the actions of an agent of law enforcement (Siegal, 2009). The possibility of an entrapment defense exists with all undercover operations, which are typically referred to as “proactive investigations”. Frequently, undercover “proactive” investigations are used in cases involving drugs and prostitution, to catch both dealers and potential customers (Mitchell, Wolak, & Finkelhor, 2005). The underlying assumption in the use of proactive investigations is that the arrested individual had a predisposition to commit the crime, and therefore, would have committed the crime eventually if they had not been apprehended. At the core of the entrapment issue regarding proactive investigations is the question: do these law enforcement agents merely provide an opportunity for criminals, or are they completely manufacturing a crime that would not have occurred in the first place (Mitchell, Wolak, & Finkelhor)? The use of the entrapment defense has been used with limited success in areas such as prostitution or drug operations (Lord, 1998; Miceli, 2007).

In Sorrells v. U.S., one of the landmark cases concerning the entrapment defense, the Supreme Court held that officers or employees of the government, who merely afford opportunities for the commission of an offense, do not defeat the prosecution’s case (Rubin, 2001). The Court, however, drew a line when the criminal design originated with officials of the government and not within the mind of an innocent person. If the government instigates an individual’s conduct through use of “fraud, trickery, encouragement, persuasion, or importunity”, the prosecution will be unsuccessful. In Sherman v. U.S., the Court held that the function of law enforcement does not include the “manufacture of crime”. The case of U.S. v.
Russell, upheld the Sorrells case, reaffirming that “to determine whether entrapment has been established, a line must be drawn between the trap for the unwary innocent and the trap for the unwary criminal”. The Russell case restated that entrapment applies only when the government’s actions implant the criminal design in the mind of the defendant.

In the case of Jacobson v. U.S., a two-part test was utilized to determine whether the entrapment defense applied. The test used by the Court in this case was 1) did the government cross the line between setting a trap for the “unwary innocent” and the “unwary criminal” 2) and whether the prosecution could establish that the defendant was predisposed to commit the offense. “When the government’s quest for convictions leads to the apprehension of an otherwise law-abiding citizen who, if left to his own devices, likely would have never run afoul of the law, the courts should intervene” (Rubin, 2001).

In State of North Carolina v. Luster, the court employed a two step analysis, “1) acts of persuasion, trickery or fraud carried out by law enforcement officers or their agents to induce a defendant to commit a crime, 2) when the criminal design originated in the minds of the government officials, rather than with the innocent defendant, such that the crime is the product of the creative activity of the law enforcement authorities”. When the entrapment defense is raised, the central issue becomes whether or not the defendant was predisposed to commit the offense. After predisposition has been proven, the defense of entrapment is no longer applicable (Rubin, 2001). There has been very little research performed in psychology on entrapment; however, of all the excuse defenses, entrapment places the largest burden on the juror, rather than some expert, to determine intent. As a result, examining what the courts have charged jurors to decide in entrapment defense cases may prove helpful in better understanding the psychology of excuse defenses in general.
For example, a study by Peters, Lampinen, and Malesky (2012) examined juror decisions for cases involving a defendant accused of soliciting a minor over the internet who pleads not guilty by reason of entrapment. To examine this, three experiments were run in which participants were presented with trial vignettes in which three variables were manipulated: who initiated the solicitation (the defendant, the agent once, or the agent several times), the inclusion of the entrapment defense, and prior behaviors of the defendant. Both the solicitation variable and entrapment defense variable were significant. Participants found the defendant not guilty significantly more often when the agent solicited the defendant first than when the defendant initiated the solicitation. Participants were also less likely to find the defendant guilty when the entrapment defense was utilized than when it was not; however, there were no significant interactions between the two variables. This study also examined attribution of responsibility and participants’ prior world beliefs. These two variables will be discussed later in the theoretical sections.

**Unspecified Excuse Defense**

The aforementioned four types of excuse defenses are those formally acknowledged by the courts; however, it is possible (if allowed by the judge) for the defense to present an excuse defense other than those previously mentioned. Such defenses are typically examined in a case by case format based on whether the judge determines the excuse to validly challenge the proof of mens rea. In theory, there is no limit to the number of things that could serve as an excuse defense, and as a result, it is somewhat difficult to examine jury decisions on unspecified excuse defenses (Siegal, 2009). However, a couple of unspecified excuses have gained research attention: battered-spouse syndrome, in which the defense claims the defendant’s ability to determine right from wrong was impaired by their repeated abuse at the hands of the perpetrator.
(Schuller, 1992), and a crime of passion, in which it is claimed that the individual lost control of their mental facilities in the “heat of passion”. Although neither are formally acknowledged by the courts, both have been used as viable defenses.

As can be seen, there are a wide variety of excuse defenses. Although they may involve different types of excuses, they’re all based on the idea that the defendant’s mental capacity to form intent was impaired for some reason. The question then becomes: how does a jury member determine whether the defendant had all the mental tools necessary to form mens rea? In an attempt to answer this question, three separate theoretical areas will be examined in relation to excuse defenses: excuses in interpersonal relationships, the traditional jury decision making Story Model, and Attribution Theory. To begin with, I will examine how excuses are viewed in general in the context of interpersonal relationships.

**Excuses in Interpersonal Relationships**

Before one attempts to examine how excuses are viewed in the context of the legal system, it would be useful to understand how excuses are viewed in the course of everyday life. Schlenker, Pontari, and Christopher (2001) define excuses as “self-serving explanations, or accounts that aim to reduce personal responsibility for questionable events, thereby disengaging core components of the self from the incident” (p. 15). In other words, excuses are reasons that an individual provides to escape accountability when they have either failed at a prescribed task, or committed a socially undesirable act. Much of the research on excuses has been performed to determine how excuses affect the performer intrapersonally, and is imbedded within impression management theory (Schlenker, 1985). Generally, the effect of excuses on the individual is seen in a positive light, with excuses helping to protect an individual’s self-esteem, decrease depression, reduce anxiety and negative affect, and improve overall health (see Snyder &
Higgins, 1988 for a review). Some negative intrapersonal effects of excuses have also been noted; however, given the focus of this paper on how others view excuses, an in depth report is beyond the scope of the current discourse. Instead, I will focus on the effects excuses have on interpersonal relationships.

**Views of Excuses in Interpersonal Relationships**

When it comes to interpersonal relationships, there are both advantages and disadvantages of offering excuses (Schlenker et al., 2001). Weiner et al. (1987) performed two studies in which they examined how participants would react to individuals using an excuse to avoid backlash when breaking some sort of social contract. In their first study, participants arrived at a study that should last only 5-10 minutes. Participants were then informed the study was designed to determine individuals’ initial impressions of others based on meeting them only for a short time period. They were also told they would start as soon as the second participant arrived. The second participant (a confederate) arrived 15 minutes late, and provided either an externalizing excuse (that an exam had held them over), an internalizing excuse (they had simply lost track of time), or no excuse at all. The authors found that the externalizing excuse resulted in lower levels of anger, resentment, irritation, and dislike, and greater forgiveness than the internalizing excuse or no excuse at all. Furthermore, those giving the internalizing and no excuse were seen as less dependable, responsible, considerate, sensitive, and interesting, than those giving the externalizing excuse. There was no difference at all between the internalizing excuse and no excuse conditions.

In their second study, Weiner et al. (1987) used a similar setup; however, this time instead of using a confederate, they had a second participant be the one to make the excuse. To accomplish this, they instructed the two participants to report to different rooms. The
experimenters provided the first participant with the same instructions as in the first study, but the second participant was asked to act like they had been late, and come up with an excuse to tell the other participant. The second participant was told to come up with either a bad excuse, a good excuse, any excuse, or no excuse. An initial examination revealed that when the participants were told to use any excuse, they created very similar types of excuses to those participants who were told to utilize bad excuses. Even when the participants were allowed to create their own excuses, they were viewed in a more positive light when they provided externalizing excuses than internalizing excuses or no excuses at all. Based on the results of the two studies, the authors concluded that if a person can provide an excuse that is of external origin, it can aid the individual in avoiding the negative repercussions of violating a social contract.

Another study by Crant and Bateman (1993) examined the effects of two types of excuses, self-handicapping and causal accounts, on employees in the workplace. Self-handicapping is a type of excuse that actually occurs before a specific task is even attempted. Essentially, the individual claims to be at some sort of disadvantage, that way if the task is failed, blame is shifted to the disadvantage. Meanwhile, if the task is successful, the individual receives even more credit for overcoming the disadvantage. Causal accounts on the other hand are more traditional excuses that are offered after the individual has failed at a task that seek to shift the blame to some sort of external source.

To examine the potential effects of these excuses, the authors presented actual employees and managers at an accounting firm with a scenario in which a fictional employee made a critical error in the auditing of an important client of the firm. In some versions, the employee gave a self-handicap indicating the great difficulty of the task (by asserting that the program used had a
number of bugs in it). In other versions, the employee gave a post hoc excuse for why he failed (because changes by the client made the task particularly difficult). The researchers found that when either a self-handicap was used before the task, or when a post hoc excuse was given, participants afforded the errant employee less blame for his failure, than when no excuse was given. Furthermore, they found that the error resulted in less punishment when an excuse was present (Crant & Bateman, 1993). This study indicates that not only can excuses reduce the negative impressions individuals have towards the transgressor, but also result in substantive differences in how they are punished. However, despite studies that show the benefits of using excuses, there are others that have shown potential negative effects as well (Schlenker et al., 2001).

Schlenker and his colleagues (2001) argued that excessive or poor use of excuses, regardless of type, can damage an individuals’ perceived character by undermining how others view the individuals’ integrity, effectiveness, and commitment to the greater good. In other words, overreliance on excuses could result in the excuser being viewed as more deceitful, ineffective, and self-absorbed, all of which decrease their reliability and their view as being able to contribute to a societal group. Evidence for this claim can be found in a study by Pontari, Schlenker, and Christopher (2002). In their study, Pontari and colleagues presented university students with a number of different scenarios designed to capture a variety of possible problems that can occur when using excuses. First, they examined instances where there was either corroborative evidence for an excuse or evidence that was somewhat contrary to the excuse. Then they examined individuals that chronically used the same excuses, as well as individuals that failed to fix the problem that they used as an excuse. Finally, they examined individuals who blame their allies as an excuse. Following the reading of the scenarios, the authors assessed
participants’ opinions about the deceptiveness, ineffectiveness, and self-absorption of the excuser, as well as how much they were to blame for the incident and the legitimacy of the excuse.

Results showed that when the individual lacked corroborating evidence, had a history of making excuses, did not try to correct the problem, or blamed their teammates, they were viewed in a significantly more negative light on all three types of character. Furthermore, they were also viewed as more blameworthy and their excuses as being less legitimate. However, if the excuser did have corroborating evidence, attempted to correct the problem, did not blame teammates, or accepted responsibility, their excuses were better accepted and they were viewed in a more positive light. Overall, it appears that when the excuses were used improperly, the participants’ views of the excuser were much worse than if he had not used an excuse in the first place (Pontari et al., 2002).

Another area that logically would affect views of the excuser’s character would be the believability of their excuses. One study extended the previously mentioned findings of excuses within the workplace by examining employees’ views of an excuse used by their boss in turning down a request they made (Bies, Shapiro, & Cummings, 1988). In this study, instead of reading vignettes, participants were asked to recall an event where they had made a request their boss refused and the boss had provided reasons for that refusal. They then rated how much they felt external circumstances caused the boss’s decision, as well as the perceived sincerity of the excuse. Finally, they indicated their feelings of anger, fairness, and whether they complained. The authors found that the greatest predictors of the employees’ negative emotions were the perceived adequacy and sincerity of the excuses provided. In other words, only excuses that seemed adequate at explaining the reasons for the refusal and excuses that were sincere were
effective in reducing the negative impact of the refusal. Excuses that failed these two standards actually resulted in worse reactions to the excuser.

Another study by Ohbuchi and Sato (1993) extended findings regarding excuses to how children viewed excuses versus apologies depending on the intentionality of the transgression. The authors presented second and fifth grade Japanese children with vignettes in which a boy damaged the property of another boy who had beaten him in a game earlier. The damage was either caused intentionally or unintentionally, and when confronted, the culprit either gave an apology, an excuse, or no response. The results showed that when the offense was intentional, the children provided less responsibility and punishment when an apology was offered, but not when an excuse was offered or no response was given. If the offense was unintentional, both the apology and excuse afforded a lower negative reaction. In other words, the children accepted the excuses if the harm was perceived as unintentional, but if the harm was perceived as intentional, the excuse was ineffective.

In a similar study, this time with college student participants, the effectiveness of excuses was examined when an individual had broken a rule (Wallis & Kleinke, 1995). Participants were shown a story in which an individual had arrived for a makeup exam, but was thoroughly unprepared. When given the opportunity, the student cheated by looking at the professor’s exam key, but was subsequently caught in the act by the professor. The student then either offered an external excuse (the test was too hard), an internal excuse (he would feel awful if he failed), or accepted responsibility. The authors found that when the student offered either an external or internal excuse, the participants assigned more blame to the student and afforded him a harsher grade penalty. The authors concluded that because of the obvious intentionality of the student’s
transgression, that neither excuse was plausible and so resulted in a worse penalty than simply accepting responsibility.

Therefore, although good excuses may help to shift responsibility from the excuser, the effect on evaluations of their character could be detrimental, especially if the excuses are improperly used. Such individuals then could be ostracized from the group, or relegated to tasks of lower responsibility and reward. For example, a study by Smith and Strube (1991) had participants decide among a group of individuals which ones would be accepted for a prestigious summer internship program. Participants were provided with a vignette in which a candidate for the internship was about to take an exam they were unprepared for. The candidate either provided an excuse resulting from an internal source, an excuse caused by external circumstances, or no excuse at all. Although both excuses were effective in reducing responsibility for a failing grade on the exam, they also both resulted in more negative views of the candidate. Furthermore, they resulted in a lower likelihood that the individual would be recommended for the internship.

Finally, Rhodewalt and colleagues (1995) used a rather creative approach to examine the effectiveness of different self-handicapping excuses. They placed participants in rooms where they were instructed to create humorous captions for newspaper cartoons. Following the creation of the captions, they were then asked to evaluate the captions of another participant. That participant either provided a self-handicapping excuse involving anxiety, low effort, drug intoxication, or did not provide an excuse at all. The authors found that participants providing an excuse of low effort or drug intoxication were evaluated more negatively than excuses that involved anxiety or when the individual provided no excuse. They concluded that participants
viewed the lack of effort or the drug intoxication as being self-inflicted and therefore poor excuses.

In summary, the research seems to point to the fact that when used properly, excuses can be highly beneficial. ‘Good’ excuses can help to maintain internal self-esteem and self-worth, as well as work to decrease punishment or conflict with others. However, if used improperly, the excuse can have a detrimental effect on how others view the excuser. An improper excuse can be caused by a number of different reasons as mentioned above; however, they can all result in a decrease in the excuser’s perceived character. In many cases, this detrimental effect from using a poor excuse is not only worse than using a good excuse, but worse than just accepting responsibility for the action and apologizing. So now the question is: how does this fit in with jurors and excuse defenses?

**Application to Excuse Defenses**

Taken at face value, general research on how individuals view excuses is comparable to how jurors will view the excuse when it is initially brought forth by the defense. However, once jurors have been provided with the judicial instructions on how they are supposed to interpret the excuse defense, things may change. Many of the findings concerning excuses place emphasis on the character of the excuser and how they will be viewed. According to judicial instructions, jurors are not supposed to decide whether they like the defendant or whether they forgive them, but rather whether the defendant had the mental capacity to have understood the wrongfulness of their actions. They are two very different questions.

That being said, it is a well established finding in jury research that jurors tend to be easily biased by their emotions and personal feelings towards the trial participants (Boyll, 1991). Therefore, if excuses can in fact damage the character of the defendant, then the findings within
the general excuse defense literature could definitely have an impact on juror verdicts. Also, some of the findings involving what is considered a good excuse seem particularly applicable to excuse defenses. First off, the finding of Rhodewalt and colleagues (1995) that self-inflicted excuses are viewed less favorably could have a very direct impact on some excuse defenses. For example, say a defendant claimed the insanity defense for murdering their neighbor because they had paranoid delusions that their neighbor was trying to abduct them. However, let’s say the individual had the paranoid delusions because they had a history of drug abuse that had permanently damaged their brain. Based on the Rhodewalt and colleagues finding, one would expect jurors to vote in favor of the drug abusing defendant less often than a defendant who was diagnosed with schizophrenia.

Another aspect that could be seen as especially important could be the believability findings in several of the studies. Essentially, if the excuse was viewed as believable, it was more likely to be accepted. This makes sense, considering why would an individual accept an excuse they believed was a lie? However, plausibility also plays a critical role in a model which I will discuss momentarily. Overall, although research on excuse defenses in general may help us understand how individuals view excuses in the real world, given the complexities of the task, it is insufficient to explain how jurors may view excuse defenses in the court room. Therefore, it is necessary to also examine excuse defenses from a general jury decision making model. The following section presents actual jury decision making research, including research done on actual excuse defenses.

Jury Decision Making Story Model

There have been a number of different jury decision making models proposed (Penrod & Hastie, 1979); however, the predominant theory is Pennington and Hastie’s (1993) story model.
Pennington and Hastie’s story model is a theory of how jurors use all the evidence to render their verdicts. According to the theory, jurors also bring with them different variations of world knowledge and use this knowledge to help interpret the evidence. According to Hastie and Pennington (2000), it is this variation in world knowledge that results in different stories (and therefore potential verdicts) being formed by each of the jurors. The story model is based on the idea that a juror makes a decision regarding the guilt or innocence of a defendant by first constructing stories in their mind of how the event may have occurred. To do this, the juror first combines all the evidence from both sides. Following this they also formulate a number of different inferences related to the evidence based on their own general world knowledge by utilizing a variety of deductive and inductive logic methods (Collins & Michalski, 1989). Once the juror creates each side’s story, they evaluate the stories by four standards or “certainty principles”: coverage, coherence, uniqueness, and Goodness-of-Fit (Pennington & Hastie, 1993).

**Four Certainty Principles**

Coverage refers to whether or not all the information provided by the evidence can be integrated into the story. The more evidence is integrated into the story, the greater the coverage; however, if critical pieces of evidence are not integrated well, the perceived coverage will decrease (Pennington and Hastie, 1993). For example, consider a trial in which an individual is accused of soliciting a prostitute, but claims he was entrapped by the undercover agent who was posing as the prostitute. The defendant makes the claim that he had no intention of soliciting a prostitute and would not have committed the crime; however, the defense’s argument fails to explain about the fact that the defendant had no reason to be in an area well known to be a prostitution hangout. In this case, the defendant’s story lacks the integration of critical evidence, and is therefore weakened.
Coherence meanwhile is governed by the story’s consistency, completeness, and plausibility. In order to obtain coherence, the story must satisfy all three aspects. A story experiences consistency when the evidence works well together. If the pieces of evidence contradict each other, the story will lack consistency. For example, if a defendant claims to have been asleep at the time of the crime, but several witnesses testify that they saw him near the location of the crime, there would appear to be an inconsistency in the story. Completeness refers to if the story given by that particular side is all exhibited in the evidence presented. For example, if the prosecution makes the claim that a particular weapon belonged to the defendant, but had no evidence of such, then a critical component of their story is missing and the story would lack completeness. Finally, plausibility refers to whether or not the story is possible or consistent with how the juror views the real world. Stories that seem impossible or highly unlikely will be viewed as less plausible (Pennington and Hastie, 1993). For instance, if a defendant claimed he was involuntarily intoxicated because the bartender must have slipped something in his drink, this is an unlikely story and would typically be viewed as less plausible.

Given the importance of coherence in the model, it has experienced a great deal of research. For example, research on the consistency aspect of coherence has found that inconsistencies in a single prosecution witness’s testimony (Berman & Cutler, 1996; Berman, Narby, & Cutler, 1995) and among multiple prosecution witnesses (Brewer, Potter, Fisher, Bond, & Luszcz, 1999) resulted in lower conviction rates. Another study by Harris and Hahn (2009) found that it was possible to simulate and formally measure this concept of multiple witnesses’ consistency by using a Bayesian approach.

Uniqueness refers to whether or not the story is the only coherent story provided. A story at first may seem to have high coherence, but if a second opposing story is also able to explain
the evidence just as well, the initial story will suffer from a lack of uniqueness. Uniqueness affects the jurors’ confidence in the story, and as a result, the juror’s perception of the coverage and coherence of the story will decrease as well. For example, consider a case in which the prosecution weaves a story of how the defendant in a murder trial was angry at the victim (motive), was in the same location as the victim (opportunity), and owned a golf club similar to the one used in the crime (means). However, the defense explains the same evidence based on the idea that yes, the defendant was angry at the victim, but people get angry at each other all the time, yes the defendant was in the same location because they work together, and yes he owned such an item, but lots of people own golf clubs. In essence, the defense has explained the same evidence, but in a different fashion, therefore, the first story is no longer unique in its ability to explain the evidence and will decrease in the likelihood that it will be selected by the jury (Pennington and Hastie, 1993). A study by Pennington and Hastie (1988) found that when they manipulated the participants’ ability to form a story from the testimony, the uniqueness of the testimony affected the confidence and coherence of that story.

Finally, the last certainty principle, Goodness-of-Fit, does not actually come into play until the jurors are trying to choose between the possible verdicts (Pennington and Hastie, 1993). Once a jury has heard all the evidence of a case, they are provided through judicial instruction with a list of possible verdicts as well as a description of the verdicts. For instance, in a homicide case, the potential verdicts that the jurors have the option to choose between could be not guilty, guilty of man-slaughter, guilty of second degree murder, or guilty of first degree murder. Each of the verdict options in turn have their own criteria that must be filled in order for their verdict to be rendered. Take first degree murder, for example. In order to be found guilty of first degree murder, “the State must prove the following three elements beyond a reasonable
doubt: 1. [Victim] is dead. 2. The death was caused by the criminal act of [defendant]. 3. There was a premeditated killing of [victim]” (The Supreme Court Committee on Standard Jury Instructions in Criminal Cases, 2010). The jury will take the story they chose based on the previous three certainty principles, and attempt to compare it to the criteria for each of the verdicts. The criteria that their story fits best will be the verdict they choose. However, if the story does not fit any of the set criteria, the juror will pick the default verdict. Given the typical standard of innocent until proven guilty, the default verdict is not guilty, therefore if the stories do not fit any of the criteria for a guilty verdict, the juror will vote not guilty.

A study by Smith (1991), found that the certainty principle of Goodness-of-Fit is particularly susceptible to interference from previous knowledge on the part of the juror. In her first experiment, Smith had participants create general versions of what they believed constituted a variety of different crimes. She found that participants for the most part had a number of common naïve understandings of crimes; however, not all these naïve understandings were correct. For example, one common finding is that participants confused assault (threat of physical harm) with battery (actually causing physical harm). These naïve understandings have been empirically shown to come from a number of settings, but the most common are from forms of mass media (i.e. news reports of crimes, or television shows depicting trials, Hans, 1990). In her second and third experiments Smith then had the participants determine verdicts for certain scenarios. In the second experiment, she let them perform this task with no instructions, while in the third experiment, the participants were provided with judicial instructions as to what each verdict meant. She found that even though the judicial instructions did have some effect in helping decide which verdict to choose, the naïve understandings that the participants brought with them still significantly influenced their judgments. These findings are
similar to McCloksey, Washburn, and Felch’s (1983) findings that lay people have naïve and often mistaken conceptions of physics and that to produce correct understandings of physical concepts such as momentum, it is not enough to teach the correct principle, but rather, it is necessary to dispel learners incorrect conceptions. Based on all four principles of coverage, coherence, uniqueness, and Goodness-of-Fit, the juror will choose the ‘best’ story to base their verdict on (Pennington and Hastie, 1993).

**Empirical Evidence**

Evidence for the story model was initially provided in a seminal study by Pennington and Hastie (1981, 1986). To examine their theory, the authors began by showing participants a video of a mock trial in which a defendant was accused of first degree murder. After watching the video, participants were asked to choose a verdict of either not guilty, guilty of manslaughter, guilty of second-degree murder, or guilty of first-degree murder. During the entire process, participants were asked to talk out loud about the evidence and their decision making process. Afterwards, they were then asked to recall what they could about the different possible verdicts and their meanings. The talk out loud and memory interviews were then coded to locate story-type remarks (references to events that occurred on the day of the crime) and verdict remarks (references to judicial instructions or anything else related to the participant’s actual verdicts). The story-type remarks were separated into explicit story references and story explanations. Explicit story references were remarks that related directly back to evidence presented in the trial, though they still could be inferential in nature. Explanation type remarks meanwhile were statements that attempted to elaborate on the evidence presented using the world knowledge that the participant brought with them to the study. Finally, the remarks were separated based on the verdicts the participants gave and combined to form a different story for each verdict type.
Pennington and Hastie (1981, 1986) found that each of the stories differed significantly from each other, and that each juror’s individual story was significantly more similar to their verdict’s general story, than to the other verdicts’ general stories. From their data they concluded that 1) a substantial proportion of the story-type comments were inferential rather than actually being included in the evidence, 2) participants’ statements did actually represent a sort of story structure, and 3) this story structure could be connected to their verdict of choice.

A second seminal study was also performed by Pennington and Hastie (1988). The goal of the second study was to directly test the spontaneity of the participants’ story construction, as well as to determine if the stories mediate their verdicts. To accomplish this goal, the authors used two different experiments. In the first experiment, participants were given a recognition memory task to determine if they had created a story structure. A recognition task was used because of some recent research at the time by Kintsch (1986) which claimed that when a memory for a story is made, it consists of verbatim representations of the surface structure, a propositional textbase, and an interpretive situation model. The authors hypothesized that if the jurors were actually creating a story, it would hold all three of these aspects. Furthermore, they expected that recognition memory would be highest for queues that can be found represented in all three areas (Perrig & Kintsch, 1985). Therefore, with regard to jury decision making, the participants should have the highest recognition memory for sentences that match their chosen verdict’s story (Pennington & Hastie).

To examine their hypothesis, the authors presented participants with the same trial as in their first study (Pennington & Hastie, 1981; Pennington & Hastie, 1986). They then extracted 93 sentences from the stories created in the first study. The sentences were separated into guilty story, not guilty story, and neutral sentences. The authors found that participants were
significantly more likely to recognize sentences that fit with their chosen verdict’s story model than sentences that fit with the opposite model. They therefore concluded that their participants spontaneously generated their stories without the help of an external interviewer’s input (Pennington & Hastie, 1988).

In the second experiment, the authors attempted to manipulate which verdict the participants would chose, by increasing the difficulty of creating either the defense’s or prosecution’s story (Pennington & Hastie, 1988). To increase the difficulty of creating the stories, Pennington and Hastie modified the order that evidence was presented. They considered the easy story creation setup to be one in which the evidence was presented in a story (temporal and causal) order. Meanwhile, the difficult story creation setup involved a non-story order in which evidence was presented in a “witness by witness” format. Therefore, a pro-defense trial would be one in which the defense’s evidence was presented in story order format, but the prosecution’s evidence was presented in a witness by witness order format. The authors expected that the participants would tend to side more often with the side that was presented in the story order format. Their hypothesis proved correct. The authors found that the participants were significantly more likely to rule in favor of the side whose story was easier to form. They also found that participants viewed the evidence as significantly stronger when it was presented in story format than witness by witness format. They concluded that the construction of a story was essential to verdict choice (Pennington & Hastie, 1988).

The third primary study in their line of research consisted of three experiments (Pennington & Hastie, 1992). The first experiment attempted to replicate experiment two from their previous study (Pennington & Hastie, 1988), while accounting for an argument that their results could have occurred simply because of differences in memory for the trials. To
accomplish this, the authors used a shorter trial version in which they manipulated both the way the evidence was presented (story versus issue) and the credibility of one of four witnesses whose testimony was inconsistent with that of the other three witnesses. They found that the manipulation of evidence presentation had an effect on the verdicts, with the story versions resulting in significantly higher in-line verdicts than the issue versions, in the absence of any differences in memory for the two trial versions. They further found that the manipulation of the evidence presentation method mediated the effects of the inconsistent witness’s credibility.

In the previous two experiments (Pennington and Hastie, 1988; Pennington and Hastie, 1992, Experiment 1), the authors manipulated the order of evidence to modify the completeness of the participants’ story construction. In experiments two and three of the current study, Pennington and Hastie (1992) sought to manipulate this perception of completeness in a different way: by supplementing the directly provided evidence with common inferences made by participants in previous studies. They expected that these inferences would help to create a more complete story. They also manipulated the amount of times the participants were asked to provide feedback. In other words, participants were either asked to render a single final verdict at the end of the trial, or smaller mini-verdicts after each piece of evidence was added. The authors expected that the incremental verdicts would interfere with story creation, because it would involve simply modifying an anchor with new information rather than forming a complete situational model. Experiments two and three were basically identical, with experiment three adding a counter-balancing. The results showed evidence in favor of their predictions. In both studies, the supplemental material swayed participants’ verdicts in the direction of the inference. Furthermore, the effect was strongest in the single final verdict version. Pennington and Hastie
concluded the inferences and the aggregation of the verdicts aided in the forming of a story and verdict decision.

**Application of the Story Model to Excuse Defenses**

There are a number of different aspects to the Pennington and Hastie (1993) theory that can be empirically examined, ranging from some of the basic tenants of jurors using previous knowledge of the world to each of the individual certainty principles. The Pennington and Hastie model was designed primarily for typical cases in which it is uncertain whether the individual committed the crime or not and, as can be expected, some aspects of the theory may apply better to excuse defense trials than others. At the time of this writing, no single study has attempted to directly test all aspects of the model with regard to excuse defenses. However, specific parts of the theory have seen some research with regard to different types of excuse defenses. The first aspect I will examine is the claim by the Pennington and Hastie model that juror’s decisions are made up not only of the evidence provided in the case, but also of their previous knowledge of the world. This question of the influence of prior knowledge (or biases in some cases) has received considerable research.

As mentioned above, according to the Pennington and Hastie (1993) story model, jurors make decisions based not only on the evidence, but also based on inferences they make from the evidence. These inferences are formed from the juror’s previous views and beliefs about how the world works. Recall from the earlier section that individuals may have some set beliefs that they come into the courtroom with regarding how they view excuses in general. It is likely that even after the presentation of judicial instructions, many of these general views of excuses will persist. With regard to the specific excuse defenses, the persistence of overall world views has been found to be true for the insanity defense in a number of studies.
For example, Bailis et al. (1995) presented participants with a vignette in which a defendant had committed a crime and was pleading insanity. The participants were given a direct American Law Institute (ALI) definition for the requirements of a defendant being found Not Guilty by Reason of Insanity (NGRI). This definition requires that the defendant be unable to fully understand the wrongfulness of or be able to control his/her actions. The defendant was then described as having varying degrees of cognitive and control impairments. Participants were also asked about their attitudes concerning the insanity defense. As expected, the authors found that the degree of impairment had an effect on the participants’ verdicts. In fact, the participants tended to use a more conservative viewpoint, typically requiring both types of impairment, rather than just one as the ALI definition states. However, more importantly, the authors also found a strong effect of the participants’ previous attitudes, and the authors speculated that the attitudes likely moderated the effects of the degree of impairment. In other words, their previous attitudes about the insanity defense altered how they interpreted either the evidence or their requirements for the defense.

In another study by Roberts, Golding, and Fincham (1987), the participants were given case summaries of a defendant who had committed murder, but this time they varied the type of mental disorder he had (antisocial personality disorder, schizotypal personality disorder, or two versions of paranoid schizophrenia), the level of bizarreness of the crime, and the amount of planning the defendant had done. They also included a scale involving participants’ attitudes toward the insanity defense. As expected, the type of mental disorder had a significant impact, with the two personality disorders resulting in fewer NGRI verdicts. However, more importantly, the participants’ prior attitudes had a much greater effect. They furthermore found that this effect was related to the participants’ desires for the defendant to be punished regardless
of their mental deficit. Another interesting finding in this study was the strong effect attitude had on participants’ choosing Guilty but Mentally Ill (GBMI) over NGRI. The authors made the claim that it was probable that the participants were coming from a just-world viewpoint, in that their personal view of the world required that someone be punished for the wrongful act. Participants therefore rejected the NGRI verdict in favor of a verdict where the participant was deemed guilty (even if the criteria for the two are in fact very similar).

A similar study by Roberts and Golding (1991) presented participants with vignettes in which a defendant was attempting to utilize an insanity defense. The authors varied the type of delusions the defendant was having, the amount of planning the defendant did before the crime, and the type of verdict available (NGRI versus GBMI). They also included an “attitudes toward the insanity defense” scale. The authors found that the strongest predictor of whether the defendant would be acquitted based on NGRI was the participants’ previous attitudes toward the insanity defense. Furthermore, they found that the attitudes themselves altered the way the participants viewed the evidence and construed the other manipulated variables. Therefore, the participants’ prior attitudes and understandings of what it means to be insane had a stronger impact on their understanding of the evidence and thereby their verdicts than any other variable.

In another study by Finkel and Handel (1989), the researchers were focused on the different ways jurors construed evidence to determine their verdicts. To examine this, the authors presented participants with case booklets which included a number of trial vignettes where a defendant is pleading the insanity defense. After reading each vignette, participants were asked to render a verdict as well as provide their reasoning for their verdicts. Following the collection of the first set of participants, the researchers then had a separate set of participants rate the first group’s reasons. The researchers found that the jurors’ reasons for choosing their
specific verdict were actually quite complex. They typically gave multiple reasons consisting of several different relevant and flexible constructs. They furthermore found that the participants that voted NGRI versus those that voted guilty provided considerably different interpretations of the same evidence. Given that all participants were provided with the exact same cases, it is likely that prior attitudes and world knowledge resulted in the participants construing the evidence differently.

As can be seen from the above examples, considerable evidence exists that jurors use previous world knowledge and attitudes in how they construe evidence presented in insanity defense cases. However, the insanity defense is not the only type of excuse defense where this phenomenon can be found. Another example of this can be seen in the study by Heath and colleagues (2009) mentioned earlier. They presented jurors with a set of static variables that typically should not be considered as evidence in an excuse defense trial: whether the excuse was self inflicted or not, the victim’s respectability, and the severity of the assault. Recall that the validity of an excuse defense requires only that the defendant be either mentally impaired or lack the capacity to form intent. None of the three variables mentioned above should have any impact on the defendant’s mental impairment or capacity to form intent. The authors, however, found that all three variables had a significant impact on participants’ verdicts. Participants were more likely to accept the PTSD excuse defense over the CCD defense; indicating a prior world view that individuals should not be able to use a condition as an excuse that they themselves were responsible for causing. The participants also were more likely to find the defendant not guilty when the defendant was more respectable; indicating a previous belief that perhaps the victim was more responsible for the assault if he is less respectable. Finally, the lower the severity of the assault, the more likely the participants were to acquit the defendant. This indicated a desire
to see some form of punishment as the severity of the crime increased regardless of impairment, similar to the findings of Robert et al. (1987). Overall, these variables should not have affected the participants’ verdicts if they were coming from a purely legal perspective. However, the fact that the variables do have an effect indicates that the participants are interpreting the evidence differently based on previously conceived notions of how the world should work.

Similar evidence can also be found in research on the entrapment excuse defense. An article by Shaffer and Kerwin (2006) examined the effect a juror’s level of dogmatism would have on their verdicts. The authors defined dogmatism as “how closed-minded a person is” (p. 1133). Essentially, individuals high in dogmatism focus on extreme judgments about both people and events and have a high respect for authority figures. Meanwhile, individuals low in dogmatism allow for more ambiguity and are less respectful of authority. The authors hypothesized that because individuals high in dogmatism had a high respect for authority figures, they would be more likely to accept the rules set by the judicial instructions; however, this would happen only when the extenuating circumstances of the crime were lower.

To examine this, the authors presented participants with trial booklets in which a defendant is accused of drug trafficking after being arrested in a sting operation. The authors manipulated the level of extenuating circumstances and also measured participants’ levels of dogmatism. They found that when given the judicial instructions of entrapment, dogmatic participants were significantly more likely to view the defendant in a more positive light, find the inducements used by the police as unreasonable, and to accept the entrapment plea. In other words, the participants’ predisposition to accept the word of the supreme authority figure (the judge) modified their interpretation of the evidence (Shaffer & Kerwin, 2006).
Finally, recall the previously mentioned study by Peters et al. (2012) that examined juror decisions for cases involving a defendant accused of soliciting a minor over the internet who pleaded not guilty by reason of entrapment. Also examined in the study were participants’ attribution of responsibility and due process versus crime control (DPCC) orientation. At this point I will examine only the effect participants’ DPCC orientation had on their verdicts, as it is the variable most pertinent to the current topic. Other findings of this study will be discussed more in depth in a later section.

Due process orientation is defined as “a commitment to fairness and egalitarianism in the application of the law through the mechanism of procedural regularity (Liu & Shure, 1993, p. 344).” Individuals with a due process orientation tend to focus more on protecting the constitutional rights of the individual and following the procedural rules set out by the courts regarding the collection of evidence and the apprehension of criminals. Individuals with a crime control orientation on the other hand are more concerned with protecting law abiding citizens from harm and tend to eschew the procedural rules in favor of putting the criminal in jail. It was expected that jurors with a crime control orientation would be more likely to convict the defendant, regardless of who initiated the solicitation or whether the entrapment defense was provided. This is because participants with a crime control orientation would view it as more important to remove such dangerous people from society. Meanwhile, individuals high in due process orientation would be more likely to acquit if the rules of due process were violated by the agent soliciting first. The authors found that participants that had a high crime control orientation were significantly more likely to provide a guilty verdict, even when the agent solicited first (Peters et al., 2012). Essentially the participants’ prior ideological standpoint
affected their verdicts, presumably through altering how they construed either the evidence or the judicial instructions.

A second aspect of the Pennington and Hastie (1993) theory with evidence that can be applied to excuse defenses is the certainty principle of Goodness-of-Fit. Recall that the certainty principle of Goodness-of-Fit states that the jurors will assess the possible verdicts available and choose the verdict that fits their chosen story. Evidence for this part of the Pennington and Hastie theory can actually be seen in parts of two of the previously mentioned articles: Roberts, Golding, and Fincham (1987) and Roberts and Golding (1991).

One portion of both studies examined juror verdicts when they were either presented with typical NGRI juror instructions or GBMI juror instructions. Therefore, in this case, jurors were given three verdict options: NGRI, GBMI, or just plain guilty (Roberts et al., 1987; Roberts & Golding, 1991). In most cases, there is a very narrow difference between NGRI and GBMI. For example, in the state of Alaska, the only difference in the definitions is that NGRI requires the defendant to be “unable” to understand the wrongfulness of their actions, while GBMI only requires the defendant to “lack the substantial capacity” to understand the wrongfulness of their actions. However, in terms of punishment, there is a great deal of difference. Typically if a defendant is found NGRI, they will be civilly committed in a mental institution; however, if the defendant is found GBMI, they can receive the full punishment of the law, as if they were just found guilty (Melville & Naimark, 2002).

In both studies, the authors found that inclusion of the GBMI verdict significantly decreased NGRI verdicts, thereby resulting in the defendant being found guilty. The authors attributed this to the idea that jurors were trying to find a middle ground between needing to punish someone for the crime, but not holding them completely responsible. In other words,
when the GBMI verdict was available, it fit their construed story better than the NGRI verdict (even though the verdicts’ definitions were similar). Previously, without the GBMI verdict being available, they could not match their story to a pure guilty verdict, so defaulted with a not guilty verdict.

Finally, it is likely that some of the other certainty principles would work for excuse defenses as well; however, no research has been specifically done to test them. First, the certainty principle of plausibility intuitively seems like it would play a big part in cases where an excuse defense is employed. Consider for example a case where the defendant is pleading insanity. If the defendant’s claim of insanity is not very believable, for instance if just the week before he/she was perfectly fine, then the jurors are not likely to rule in the defendant’s favor. Likewise, if say in a case of entrapment, the defendant claims to have had no predisposition to commit the crime, yet had previously been incarcerated for the same crime, the plausibility of their story would decrease, and jurors would be more likely to convict. A similar concept can be seen in the results of Peters et al. (2012). One possible explanation for why participants were significantly less likely to accept the entrapment defense when the defendant solicited first is because it is less plausible that the defendant had no predisposition when he was the one that initiated the solicitation. Also, recall from the theory of general excuses section earlier in this paper that the plausibility of the excuse had a great impact both on whether the excuse was accepted as well as how the excuser was viewed. The other certainty principles would likely play a similar role as in non-excuse defense trials perhaps to a slightly lesser degree as I shall discuss in the next section.

**Weaknesses of the Story Model with Regard to Excuse Defenses**
Although the Pennington and Hastie (1993) Story Model does explain a substantial portion of jury decision making in excuse defense cases, it does have some weaknesses. First, as mentioned above, although some parts of the theory have been tested in excuse defenses, several parts have not. Even for those aspects that have received some research, the research is sparse and is largely limited to the insanity excuse defense. This is not too surprising given the closeness between psychology and the insanity defense; however, it is possible that what occurs in an insanity defense case would be different than what occurs in other types of excuse defense cases. In order to determine if the story model theory can be applied to excuse defenses, considerably more research must be done on the other aspects of the theory. Also, the research needs to be expanded to other excuse defenses such as entrapment or the intoxication defense, rather than just the insanity defense.

Secondly, although the Pennington and Hastie (1993) Story Model would seem to be a good starting point for understanding the theory behind juror decision making in excuse defense cases, it might not be enough to fully explain how jurors make their decisions. In a typical case, jurors are only required to determine whether or not the defendant is the individual who committed a specific crime. In such a case, it makes both intuitive and empirical sense that jurors would form stories to aid in their decision making process. However, in a case where an excuse defense is utilized, the jurors are attempting to determine whether the defendant should be held responsible for his/her actions. Although the narrative comprehension and evaluation used in the Story Model framework would likely include motives and internal states, the Pennington and Hastie model tends not to focus on these types of causal and attributional relationships. Therefore, in the next section I will discuss the potential application of Attribution Theory to juror decision making in excuse defense cases.
Attribution Theory

Attribution Theory is defined as a theory of person perception that “concerns the processes through which an individual assigns causes to various responses he makes or observes and the consequences of his resulting beliefs about causality” (McArthur, 1972, p. 171). Attribution Theory is not a young theory, with some placing its origins dating back to early experiments in the 1950s (Gilbert, 1998). Nor is it a new idea to use Attribution Theory to attempt to explain normal jury decision making, though it has fallen out of favor when compared to the more cognitive approaches like the Story Model (Penrod & Hastie, 1979). The purpose of this section will be to examine how Attribution Theory can be used to explain jury decision making with regard to excuse defenses. Furthermore, I will attempt to show Attribution Theory complements aspects of the previously mentioned two models and is a necessary addition to the overall framework.

To accomplish this goal, I will begin by providing a brief history of attribution, including how it has transformed over the years. I shall follow the overall history with an in depth discussion of Kelley’s ANOVA model, which has particular pertinence to excuse defenses. Next I will discuss some of the literature that has applied Attribution Theory to jury decision making, as well as the few studies that have used Attribution Theory when explaining an excuse defense. Finally, I will conclude this section by focusing on how Attribution Theory can be integrated with the two previously mentioned theories to provide a more comprehensive understanding of the topic at hand.

History of Attribution Theory

As with any major area of science, there are of course some differing opinions concerning where Attribution Theory originated from and, considering it’s a psychological
theory, many would place its origins somewhere in ancient Greek times. However, Aristotle aside, most historians would view the formal father of Attribution Theory to be Fritz Heider (Gilbert, 1998). Although most of his writing involved more formal theorizing than experimental manipulation, in his book, Heider (1958) set in motion some of the very basic tenants of Attribution Theory.

Heider based much of his theory on an analogy with object perception. Put simply, when an individual views an object, his visual system automatically separates the experience into two sets of information: stable dispositions and transient situations. Dispositions are those characteristics of the object that the perceptual system always understands are inherent in the object, for example, that a ball is always round. The situational experiences, however, may vary depending on the external situation, for example say the direction an individual is viewing the ball from causes it to look oval shaped instead of round (Heider, 1958).

Heider (1958) theorized that humans view other individuals’ actions in a similar fashion, as having both internal dispositions of the person and external dispositions of the environment. Our attribution skill then works by unconsciously ‘extracting’ the more invariable internal dispositions from their highly variable behaviors. According to Heider, individuals use their attribution system to examine behavior in terms of the interaction between “capacity” and “motivation”. In other words, the individual must be able to perform the behavior, and the individual must be willing to perform the behavior. Capacity in turn can be broken down to dispositional factors of ability or skills, as well as external factors in the environment that may limit or aid the individual. Motivation on the other hand is based on the individual’s intention and effort. Using these different aspects, the attribution system determines which behaviors to equate to internal dispositions versus external situational factors. For example, consider a
defendant arrested in a drug sting operation. Two different factors may exist, the external factor of the sting operation which provided him the opportunity to sell the drugs, and the internal dispositional factor of being a drug dealer who would typically have sold the drugs regardless. Deciding which one is more in line with that particular situation could determine the verdict a jury chooses.

Heider’s version of Attribution Theory was not well accepted in the scientific community due to its complexity and its attempts to cover too much breadth (Gilbert, 1998). To remedy this problem, another pair of researchers, Jones and Davis (1965), proposed their theory of Correspondent Inferences. Instead of the global views of Heider, Correspondent Inferences focused specifically on the rules the attribution system follows to determine the intentions another individual had when making a decision. In other words, they wanted to know how people determine the goals of a specific actor, as well as what that gained information tells them about the actor. According to Jones and Davis, the observer focuses on the amount of unique consequences available to the actor, as well as the basic desirability of those actions.

When an individual makes a decision, they do so from a number of options that may have qualities in common with each other, as well as qualities that are unique. According to Jones and Davis (1965), individuals can only infer intention based on the unique qualities of a choice. For example, say a boy can choose from a set of three identical balls, one of which is blue, one of which is red, and one of which is green. If the boy chooses the blue ball, one cannot infer that the boy intended to choose something round, because all the balls were round. However, you could potentially infer that the boy intended to choose blue over the other two colors, because the color was unique. Jones and Davis referred to these unique qualities as “noncommon effects”.
However, a problem occurs when more than one noncommon effect exists. In such a case, the observer is unable to determine with absolute certainty what the intention of the actor is. At this juncture, the observer relies on the social desirability of the potential options. In other words, it is unlikely that an individual would seek out a negative consequence; the positive consequence is the one the actor most likely intended to gain. For example, if an individual gets intoxicated at a party, it is unlikely that their goal is a hangover or liver disease. A more likely intention would be the desirable positive effects of being more sociable and having a good time (Jones & Davis, 1965).

Lastly, Jones and Davis (1965) made the assertion that for the most part, people are not concerned with “common” intentions, but rather extraordinary ones. If the specific actor’s intention is one that nearly everyone would have, then it does not tell others anything about the person, other than perhaps they are normal. Instead, individuals want to know what about that person is different. For example, consider a store clerk who is being held at gunpoint by a thief. If the clerk hands over the money, it can be inferred that he did this with the intent of staying alive. Unfortunately for the observer, this is rather unextraordinary since most people have the desire to stay alive. However, if the clerk refuses to hand over the money on the account that he is unafraid of being shot, it can instead be inferred that he is a rather courageous man in the face of danger. This is a more unusual decision and tells much more about the individual. Jones and Davis referred to this phenomenon as the “correspondent inference”. Jones and Davis’s additions to Attribution Theory were highly useful, but the theory was still not complete.

Following Jones and Davis, another researcher, Harold Kelley, greatly expanded Attribution Theory in a way that catered well to the views of other scientists (Gilbert, 1998). Kelley (1971) made the claim that essentially normal individuals determine another persons’
disposition in the same way that scientists determine things in research: through “causal analysis”. According to Kelley, to infer whether one thing caused another, an individual focuses on the covariation between causes and effects, which he referred to as the “covariation principle”. Following the covariation principle, observers focused on three rules or properties of the events to help them determine whether a behavior was caused by an individuals’ disposition or some outside force beyond their control: consistency, distinctiveness, and consensus.

A specific behavior is shown to be consistent if it occurs the majority of the time, for example, “James frequently skips his Psychology class”. A behavior is shown to be distinctive if it occurs in more than just the one situation: “James also frequently skips History class”. Finally, the behavior is seen as lacking consensus if it can be shown to be different from how other individuals would act: “Daniel and Robert do not skip Psychology class”. If all three rules are satisfied, then according to Kelley (1971), it can be inferred that the behavior is the result of an internal disposition of the actor and is “worth discovering”.

The second part of Kelley’s (1971) theory involved the “discounting principle” which focused on the concept that when more than one potential cause is available, the certainty that any one of them is the actual cause is weakened. In other words, if there is more than one plausible explanation for the behavior, it is more difficult to attribute that behavior to the disposition of the actor. Finally, the third addition of Kelley was the expansion of the term situation. In previous versions of Attribution Theory, situation referred rather strictly to some external force in nature, for example a strong current preventing a swimmer from crossing a stream. However, Kelley expanded situation to include external influences on an individual’s capacity as well as influences on their motivation. The influence of motivation is a rather broad conceptualization in that it could even allow for certain factors that are inside of the actor. For
example, under Kelley’s interpretation, a situational cause could even include things like being intoxicated or having a mental breakdown.

Given the centrality of Kelley’s (1971) model to Attribution Theory, it would seem prudent to examine one of the primary bodies of evidence for the model: a study by McArthur (1972). McArthur attempted to validate and expand Kelley’s model by examining the effects of Kelley’s information sources on the attributions made by participants in different circumstances. To accomplish this, she manipulated the levels of distinctiveness, consensus, and consistency, and asked participants to make either a person, a stimulus, or a circumstance attribution. She also asked participants to indicate what type of future actions the actor was likely to take.

Given the multitude of variables, not surprisingly the author had a number of different findings (McArthur, 1972). First, she found a specific pattern for each of the three attributions. Essentially, when consensus and distinctiveness information were low, but consistency information was high, the participant was most likely to make an attribution to the person. In other words, the participant was more likely to attribute an action to something inherent in the individual when others typically would not have behaved in the same way, the actor acts the same toward other stimuli, and the actor acts the same way to the same situation. Meanwhile, the participant was most likely to make a stimulus attribution when all three sources of information were high. So, when the actor would have acted the same toward the same stimulus, but differently to other stimuli, and others would have acted the same way to said stimulus, the participants attributed the cause to something inherent in the stimulus. Finally, participants were most likely to make a circumstance attribution when distinctiveness was high, but consistency was low. Participants were likely to attribute the action to the specific circumstances if the actor would not have acted the same way to either the same or other stimuli.
McArthur (1972) also made an important observation. Using her findings, it was possible to determine which type of information has the strongest effect on each of the three attributions. She found that distinctiveness information has the greatest effect on whether an individual will make a person (low distinctiveness) or stimulus (high distinctiveness) attribution. Meanwhile, if one wished to evoke a circumstance attribution, then pieces of consistency information are the most important to manipulate. This is useful if one is considering attempting to alter some observer’s attribution of responsibility for an action. If there is limited time and/or information available, then focusing on the specific information for the desired attribution would be helpful. For example, consider an individual that pleads entrapment to a drug trafficking charge. If the defense wishes to convey that it was in fact the circumstances of the sting operation that caused the defendant to purchase the drugs, then it would be most helpful if they could show a lack of previous drug purchasing behaviors.

McArthur (1972) also found that the different types of information had a significant effect on what the participants expected the actor to do in the future. Participants’ likelihood to generalize the actors’ behaviors to other stimuli was greater for low consensus and distinction. The author explained this by stating that given that consensus indicates the behavior originated in the actor, which means “he is an emitter of that response which suggests that he will emit it in the presence of other stimuli as well” (p. 189). Meanwhile, high consensus and distinction was associated with the expectation that the actor would make different responses to the same stimuli, rather than the same reaction to different stimuli. This is important once again if considered from a legal standpoint. One potential goal of the justice system would be crime control. If a juror (particularly one with a crime control orientation) believes a defendant is
likely to commit another crime in the future, he/she is potentially more likely to render a guilty verdict (Liu & Shure, 1993).

Application to Excuse Defenses

Overall, Attribution Theory provides a number of concepts to help better understand how jurors may make decisions in cases involving excuse defenses. The first area that can be applied is Heider’s (1958) separation of internal versus external. With excuse defenses, essentially the juror is trying to decide if the defendant’s actions were caused by something internal in the individual or if it were some sort of external cause. Jones and Davis (1965) extended Heider’s Attribution Theory to focus mainly on how people determine intentionality. It is not just an internal cause the jurors are looking for, but rather the intentions of the defendant. Recall from the definition of a crime mentioned earlier, a defendant must have both actus rea and mens rea. Attribution Theory may be the method jurors use to determine if a defendant had mens rea. Another application specifically from Jones and Davis can be seen in the entrapment defense. According to the Jones and Davis model, only intentions that are different from the intentions everyone else would make provide the observer with information about the internal dispositions of the actor. In the entrapment defense, this is similar to the requirement that the undercover agents’ actions would have swayed the average individual to do the same thing. In other words, if the inducements used by the agent were so strong that the normative behavior would have been to accept them, then the jury member cannot infer a criminal intent on the part of the defendant.

Finally, Kelley (1971) and McArthur (1972) provided a number of more specific ways in which individuals could determine intentionality. I will now examine how each of them could work in a jury setting. First, it is likely that Kelley’s covariation principle is something akin to how jurors examine different pieces of evidence in an excuse defense trial. Each piece of
evidence that is related to whether or not the defendant possessed mens rea has additive or negative strength toward determining the defendant’s guilt. Kelley also helped by expanding potential non-dispositional causes to forces not just limited to the external environment. For example, even though a disorder like schizophrenia exists within the individual, it could still be considered non-dispositional cause, due to the fact that it removed the defendant’s ability to act in a truly intentional way. Finally, it is also likely, that the trial evidence provided could be specifically applied to the three proprieties Kelley proposed: consistency, distinctiveness, and consensus.

First, let us consider consistency. Recall that consistency refers to the idea that the actor is likely to perform the same action toward the same target every time (Kelley, 1971). From a legal standpoint, the defendant will commit the same crime toward the same type of victim each time. This actually has two potential applications to juror decisions in excuse defenses. Firstly, if the defendant had committed the same crime in the past, it is unlikely that they were unable to form intent every time and the jury is likely to find in favor of the prosecution. This is especially true in the context of entrapment where consistency could be a strong indicator of predisposition. Secondly, consistency could also have a possible detrimental effect toward the defendant during the sentencing phase. If the jurors have made an internal attribution toward the defendant, in line with consistency, they are likely to believe the defendant will commit the crime again in the future if given the opportunity. Therefore, in order to prevent this, they may impose a harsher sentence, particularly if they have a strong Crime Control Orientation (Liu & Shure, 1993).

Given its similar focus on the actor, distinctiveness too can be applied to excuse defenses. Once again, distinctiveness refers to the actor performing the same behavior, but towards different targets (Kelley, 1971). Distinctiveness could have a number of different applications,
depending on the type of crime and could have either a positive or negative effect on the defense’s case. Consider a trial in which the defendant is pleading insanity to a charge of assault. If the defendant has a history of going into uncontrollable rage and attacking others because they are schizophrenic, then it is likely the defense will succeed. However, consider different circumstances. Say a defendant is attempting to plead entrapment to a drug trafficking charge. The defendant has never been arrested for drug trafficking, but has been arrested for a number of other crimes, indicating a tendency for lawbreaking behavior. In this case, the defense is unlikely to be successful.

Finally, consensus has potentially the most impact on excuse defenses, especially the entrapment defense. Recall that consensus refers to the fact that individuals other than the defendant would have acted in the same way to toward the same object or situation (Kelley, 1971). This is a direct parallel to the entrapment defense’s concept that the police had acted in such a way that it would have convinced the average law abiding citizen, rather than just the average criminal. This could, however, be one of the hardest to convince a jury member of. Given that most jury members are “average law abiding citizens” (or at least are supposed to be), they are likely to attempt to compare the defendant to themselves. Furthermore, given the high likelihood of a self-serving bias (Heider, 1958) on the part of the juror, they are unlikely to believe they would have acted in such a criminal fashion.

Given the closeness to the definition of excuse defenses, it may even be possible to apply McArthur’s (1972) findings of which information combinations result in different attribution types. For example, given that the defense would most likely desire a situational attribution from the jury, the defense attorney should present the evidence in such a way as to make all three categories of information as being high. Furthermore, since distinctiveness seemed to have the
strongest effect, they could focus most on evidence supporting claims that the defendant’s actions were highly distinct to the one situation. However, this application is purely speculation based on McArthur’s findings, and no research has been done to attempt to prove its validity yet.

**Empirical Evidence**

Although no research has explicitly tested different aspects of Attribution Theory to jury decisions, a number of studies have made a more general application of the theory in the form of attribution of responsibility. Some of these studies have already been discussed in the previous theoretical section in detail; therefore, only results directly related to Attribution Theory will be discussed here.

Recall the Roberts et al. (1987) and Roberts and Golding (1991) studies on the differences between NGRI and GBMI verdicts. Although the focus of both studies was primarily on how the jurors’ previous biases and construals of evidence affected their verdicts, they both also included an attribution of responsibility scale. Roberts et al. found that in addition to previous biases, attribution of responsibility had a direct effect on the participants’ construals, which in turn affected their verdicts. Roberts and Golding expanded on this notion by finding that construals related to attribution of responsibility predicted verdicts far better than the primary design variables within the study. They speculated that the attributions of responsibility construals were mediated by the participants’ biases toward the insanity defense, which resulted in how the juror decided to vote.

Also, again recall Peters et al. (2012) from the previous theoretical section. In their study, participants found the defendant not guilty significantly more often when the agent solicited the defendant first than when the defendant did the soliciting. Participants’ attributions of responsibility toward the defendant were also assessed in this study. Attribution of
responsibility was a highly significant predictor of juror verdicts. More importantly, the participants’ attributions were shown to be a significant mediator of the effect of who solicited first. In other words, attribution not only was a critical part of the jury decision making process, it also mediated the effects of the evidentiary variables presented in this study.

A similar study by Roberts, Sargent, and Chan (1993) once again examined differences in NGRI and GBMI verdicts, but this time only presented participants with a vignette involving a stereotypical legally insane defendant. The defendant was highly psychotic with delusions that the victim of a homicide was attempting to kill him, as well as accompanying auditory hallucinations that increased the strength of the delusions. He was also described as having a long history of psychotic tendencies. Diagnostic and expert opinions were omitted from the vignette to enable participants to decide on their own whether the defendant was legally insane or not. Overall, the authors found that participants who voted GBMI had significantly different construals than participants who voted NGRI. The addition of the GMBI option did not have a direct effect on verdict choices, but rather affected the attribution of blame thresholds. When the GBMI option was provided, those that voted GBMI had considerably higher thresholds of attribution of blame and responsibility for the defendant to have been found not guilty. In other words, it was the participants’ attribution of blame and responsibility that resulted in participants making different verdict decisions.

Dunn, Cowan, and Downs (2006) performed a study to determine the effects a defendant’s sex and race would have on juror decisions in a filicide case. Filicide refers to the murdering of one’s own biological child by a parent. Given the extreme nature of the act, it is not uncommon for the defendant in these cases to have a severe psychological disorder (Sadoff, 1995). The authors presented the participants with a trial in which a parent murdered their
children either by smothering them with a pillow or shooting them with a handgun. They also manipulated whether the parent was Caucasian or African American and whether it was the father or mother. Dunn et al. hypothesized that participants would be less likely to vote NGRI for the cases that were contrary to stereotypes of gender and race. This was based on Attribution Theory’s (Jones and Davis, 1965) claim that unique acts are more likely to result in dispositional attributions (and therefore guilty verdicts).

Dunn et al. (2006) found support for their hypothesis regarding gender. Males were judged harsher when they smothered their children, and women were judged in a harsher manner when they used a gun. This is in line with the stereotype that males are more likely to murder their children with weapons, while females are more likely to murder their children by cutting off their air supply (Lewis, Baranoski, Buchanan, & Benedek, 1998). No effects were found, however, for race. The authors speculated that the gender stereotype was stronger than racial stereotypes for filicide; however, more research would be needed to support this claim. Overall, although the results’ connection to Attribution Theory is limited at best, it is the only article to be found that examined a specific part of Attribution Theory as it relates to excuse defenses.

Heath, Stone, Darley, and Grannemann (2003) examined juror perceptions of a variety of different excuse defenses. The excuses were divided based on origin into three distinct categories: Biological, Environmental, and Psychological. Biologically based excuses included a variety of genetic excuses, for example XXY syndrome. Environmental excuses were far more varied, including everything from consumable substances to childhood events to television violence. Psychological excuses were based primarily in insanity pleas and included disorders such as schizophrenia and dissociative identity disorder. Participants were presented with a case in which a defendant is accused of assault and battery, but is pleading not guilty by reason of
some excuse defense. Following the short vignette, participants were asked to rate 15 different excuse defenses based on their credibility, persuasiveness, responsibility of the defendant, and they were asked to provide a verdict and sentence recommendation.

The authors found that the credibility and persuasiveness of each excuse defense was correlated with the amount of responsibility participants attributed to the defendant (Heath et al., 2003). The more credible each excuse was, the more persuasive it was, and the less responsibility the participants attributed to the defendant. Also, the less control the participant was deemed to have over his actions, the less responsibility the participants attributed to him. Overall, when the defendant was attributed as having less control and responsibility, the participants were significantly more likely to find him not guilty and to recommend lower sentences. This study indicated that if the excuse was believable and persuasive, participants were less likely to make a dispositional attribution in both control and responsibility.

Furthermore, this dispositional attribution predicted both verdicts and recommended sentences.

Finally, Heath, Grannemann, Peacock, and Dulyx (2001) presented participants with a trial in which a defendant is accused of assaulting another individual, but provides an excuse as to why he is not guilty. The authors manipulated the self-inflictedness of the defendant’s excuse, as well as whether or not the victim was partially responsible for the cause of the excuse. The authors found that the more self-inflicted the impairment that the defendant attempted to use as an excuse defense, the more the participants attributed blame for the crime to the defendant. In turn, defendants who were attributed less responsibility for the crime had significantly fewer guilty verdicts. Furthermore, if the victim was partially to blame for the crime, participants voted guilty less often, as well. The authors concluded that when some of the attribution of
responsibility could be shifted to either an excuse or another individual, the excuse defense is more likely to be successful.

**Limitations**

As can be seen, overall, there are several ways in which Attribution Theory could be applied; however, Attribution Theory is also insufficient, on its own, to fully explain jury decision making in excuse defenses. First, although attribution can work to explain the final parts of how jurors determine a defendant’s intentions, it is unable to explain the process or how the jurors organize all the evidence to aid them in their attributions. The way the legal system is organized can create a particularly difficult scenario for jurors to make a coherent attribution. They must take evidence from two competing sides, often which disagree with each other. Furthermore, they may receive all sorts of evidence from a variety of sources which they must make sense of. On top of that, the juror’s attribution is extremely important as it can determine whether or not the defendant’s freedom is taken away from them.

Secondly, Attribution Theory fails to take into account the different legal statutes and judicial instructions that are provided to the juror. Although some of the instructions seem to parallel Attribution Theory, others may not, and such instructions could alter how the juror makes their attribution. Finally, Attribution Theory is for the most part applicable to only a single person making an attribution. In the courtroom, however, there are (typically) 12 jurors who deliberate and this may alter how those attributions result in a verdict. That being said, Attribution Theory can be used at least with predeliberation jurors to help determine what attribution decisions they bring with them to the deliberation table.

**Comprehensive Theory of Jury Decision Making for Excuse Defenses**
In the previous sections, I reviewed three different theories that can be used to help explain jury decision making in excuse defense trials. First, I examined how excuses were viewed generally in everyday life (Schlenker, 1985). Second, I reviewed Pennington and Hastie’s (1993) Story Model which attempts to explain jury decision making for traditional defenses. Finally, I considered Attribution Theory (Heider, 1958) in the context of excuse defenses. Although each of these theories can contribute individually to the understanding of juror decisions in excuse defense trials, they also all have significant limitations as mentioned above. The goal of the next section is to recognize some of the major similarities between the three theories and create a potential conglomerate theory that better explains excuse defenses.

**Similarities Between the Theories**

Even though there are considerable differences between the three theories, there are a number of similarities between them as well. On the surface, the most obvious similarity between the three theories involves the typically used methodologies to study them. In all three cases, the methodology almost exclusively involves having the participant either reading a mock scenario or visualizing a potential situation and attempting to imagine how they would react to it. This is not unexpected in any literature that specifically involves jury verdicts given the difficulty of creating a realistic juror situation; however, a few of the methods utilized in the general excuses literature were more creative (i.e. Weiner et al., 1987). It may be possible to adapt some of the methods from the general excuses model to the actual jury setting and improve the external validity of the research.

Another major similarity across all three theories is the importance of the believability of the excuse. Believability is typically referred to as plausibility, one of the governing aspects of coherence in the Pennington and Hastie (1993) Story Model. Believability was also seen as
important in the context of general excuses. If individuals lacked corroborative evidence for an excuse, or if evidence existed that was contrary to the excuse's claim, the excuse proved ineffective and the excuser was viewed in a more negative light (Pontari et al., 2002). Participants also felt more negative emotions and had more negative views of the excuser when excuses were perceived as inadequate and insincere (Bies, Shapiro, & Cummings, 1988). The believability of the excuse defense was also seen to impact the participant's attributions of responsibility and verdicts (Heath et al., 2003). The more credible the excuse defense, the less responsibility was attributed to the defendant. It makes sense that how much the receiver of an excuse believes what they are being told has a major impact on their willingness to accept the excuse, regardless of whether they are in a courtroom, at work, or just walking down the street. Therefore, the believability of the excuse defense is likely at the core of juror decision making in excuse defenses. In fact, it is entirely possible that believability must be established in an excuse defense before any other consideration on the part of the juror may occur. That being said, there are other important similarities between the three theories.

There are a couple of important similarities between how excuse defenses are viewed in general (Schlenker, 1985) and the Pennington and Hastie (1993) Story Model. First, the certainty principle of coverage in the story model refers to how well the pieces of evidence are integrated into each side's story. The more evidence that is represented in the story, the better that side's story is perceived and the more likely it is to be selected. This is similar to an aspect of general excuses where the adequacy to fully explain their reasons predicted the emotional reaction of the individual (Bies, Shapiro, & Cummings, 1988). It makes intuitive sense that being able to better explain events would improve how individuals view an explanation, regardless of whether that explanation takes place in the courtroom or real life. This also makes
sense with regard to excuse defenses. In a normal trial, the coverage of each of the pieces of evidence influences how the jury decides. In an excuse defense case, the excuse itself and the rationale the defendant provides in support of that excuse become the evidence. Essentially by providing an adequate excuse, the defense is satisfying the coverage component of the Story Model.

The second similarity between general excuses and the Story Model revolves around the concept of completeness, a critical component of the certainty principle of coherence. Completeness refers to whether claims made by one story are actually represented in the evidence (Pennington & Hastie, 1993). This is similar to a finding in the general excuse literature referring to the lack of corroborating information or the presence of contrary information. Participants who lacked collaborative information in support of their excuse were looked upon more poorly and suffered worse punishments than those who had corroborating information (Pontari et al., 2002). This once again makes intuitive sense concerning excuse defenses if considering the supporting information of the excuse defense as evidence. If that evidence fails to match the claims the defendant is trying to make, it would obviously greatly decrease the effectiveness of the defense.

There is also a major similarity that exists between the general excuse literatures (Schlenker, 1985) and Attribution Theory (Heider, 1958). This similarity is based on how individuals view certain behaviors as internal versus external. In the general excuse literature, individuals who used internalizing excuses (Weiner et al., 1987; Wallis & Kleinke, 1995) were viewed in a more negative fashion. Similarly, individuals whose act was obviously intentional or their excuse was self-inflicted (Smith & Strube, 1991) had less success with their excuses. This is similar to the attribution literature with regard to excuse defenses, where internal or self-
inflicted excuse defenses were less effective at swaying juries (Heath et al., 2003). This is a critical similarity when one considers the centrality of intention to Attribution Theory (Kelley, 1971). Essentially, even though the general excuse literature does not explicitly mention Attribution Theory, the connection could be made that a significant predictor of whether an excuse will be accepted in general is based on how the receiver of the excuse attributes intention for the action. This in turn could help to explain why or why not an excuse defense is effective in the courtroom.

The final major similarity is between Attribution Theory (Kelley, 1971) and Pennington and Hastie’s (1993) Story Model. In Kelley’s model of Attribution Theory, one of the primary concepts was the “discounting principle” which stated that if more than one potential cause for an event exists, the certainty that any one of them is the actual cause is weakened. This is very similar to the Story Model's certainty principle of uniqueness that says a juror's confidence in a side's story weakens if the other story is able to explain the evidence just as well. This is important if you again look at a defendant's rationale for their excuse as evidence. If their rationale helps to create a strong second story for their actions, then the act is less likely to be attributed to the defendant and the excuse defense is more likely to be successful.

Overall, there are a number of important similarities between the three divergent theories. Although other similarities may exist, the ones listed above are the similarities I deemed most important. With them, I can begin to create a comprehensive theory to better explain juror decision making in excuse defense cases. The following section is an attempt to create such a theory, by combining aspects of the three previously mentioned theories, with some focus on their similarities.

A Combined Theory
To create a combined theory of jury decision making for excuse defenses, it makes sense to use Pennington and Hastie’s (1993) Story Model as a basis for my new theory. In a case where an excuse defense is utilized, it is highly likely that jurors go through much of the same processes as in a typical criminal trial. As in the Story Model, jurors will create each side’s story using their previous world knowledge to make inferences about the evidence. Then the jurors will use the previously mentioned certainty principles to evaluate each story. In essence, the current theory is an extension of the Story Model to adapt it specifically for the special circumstances involved in an excuse defense case. That being said, I will now walk through the parts of the Story Model as applied to these types of cases.

As previously mentioned, one of the critical components of the Story Model is that jurors evaluate not only the provided evidence, but use previous world views and experiences to make their decisions. Much of the primary evidence that is entered in a case where an excuse defense is utilized will revolve around the excuse itself, rather than direct physical evidence as in a typical case. As such, this evidence will be focused on determining the defendant’s ability to form intent. The defense will present evidence attempting to show the defendant was unable to form intent, while the prosecution will attempt to refute those claims by showing the defendant did in fact intend to commit the crime. It is likely that the other two previously covered research areas (general excuses and Attribution Theory), play a critical part. In other words, jurors bring their general views of excuses and determining intent of actions with them to the courtroom to help them make sense of the excuse evidence.

In terms of the general excuses theories, jurors will have a preconceived notion regarding how to evaluate excuses. Jurors will view the excuse defense in a positive light if they view it as sincere and believable (Bies et al., 1988). The excuses will also be evaluated in terms of the
intentionality of the act. When an act is viewed as intentional, the excuse is less successful and in fact results in an even more negative view of the person attempting the excuse (Ohbuch & Sato, 1993; Rhodewalt et al., 1995). This is ironically circular given that the driving force of an excuse defense is determining the defendant's intent. The findings in the general excuses literature would seem to imply that by attempting an excuse defense in which the defendant's intent is at question, the defendant is potentially risking a more negative reaction if his or her excuse is not accepted. This in turn could result in harsher punishment recommendations by the jurors than if the defendant had simply pled guilty. This focus on intent also brings us to the second set of information that a juror will bring with them: how to determine the intentions of an actor.

As previously mentioned, the primary method through which an individual determines the intentionality of another individual’s actions can be explained using Attribution Theory (Heider, 1958). According to Kelley (1971), individuals use the covariation principle to determine the intentionality of an actor's behavior. One would imagine that jurors would maintain this view that it is possible to determine an individual's intent by examining the consistency, distinctiveness, and consensus of the action. As such, it is likely that the jurors will organize the presented evidence as it applies to one of the three properties. Furthermore, the findings of McArthur (1972) indicate that it is possible to determine which property has the greatest effect on the type of attribution the individual will make. Jurors will bring this same sort of weighing criteria to the courtroom. For example, evidence that points to high distinctiveness of the act will likely aid the defense more than evidence that portrays the act as highly consistent.

The second major part of the Pennington and Hastie (1993) Story Model consists of the four certainty principles of Coverage, Coherence, Uniqueness, and Goodness-of-Fit. These
certainty principles will most definitely still apply to excuse defenses; however, I propose a fifth principle: attribution of responsibility. The attribution of responsibility principle includes aspects from both the Attribution Theory (Kelley, 1971) literature concerning how to attribute the intent of the actor’s behaviors, as well as from the general excuses literatures, with regard to how the excuses themselves are evaluated.

Jurors would assess the attribution of responsibility after creating their stories using the principles of Coverage, Coherence, and Uniqueness, but prior to assessing the chosen story for Goodness-of-Fit. It is necessary for the jurors to evaluate the stories formed for each side first, because pieces of the first three principles contain important aspects of the other two theories concerning how the excuses are evaluated and the attributions are made. Essentially, the attribution of responsibility principle is added specifically to evaluate the evidence against or in favor of the excuses. For example, the plausibility aspect of the Coherence principle would have a major impact on whether the juror believes and accepts the evidence in favor (or against) the excuse. Also, it makes sense that the jurors would attempt to determine the attribution of responsibility of the defendant before determining the Goodness-of-Fit, because the juror’s verdict choice should be based on the intent of the defendant. It would be possible for a story to be selected based on its overall Coverage, Coherence, and Uniqueness, but still fail to influence the verdict choice. For example, say the juror selects the defense’s story because the evidence flows together better, it explains the evidence better, and seems more reliable overall. However, even though it may be better than the prosecution’s story, if it fails to prove that the defendant was unable to form intent, then the juror will still find the defendant guilty.

Finally, the juror will use the principle of Goodness-of-Fit to compare the story to the available verdict choices to make their decision. There is one difference in this section however.
The Goodness-of-Fit in a typical trial favors the defendant because if they cannot match well to a verdict choice, they must choose the default, which is not guilty. In an excuse defense trial, however, this same principle could work against the defendant due to the affirmative nature of the defense. Since the burden of proof is now on the defendant, the default choice becomes guilty. Therefore, if the juror fails to find a verdict match, they should revert back to finding the defendant guilty, instead of not guilty.

Overall, much of the above theory is still highly speculative. Therefore, it is necessary for a great deal of research to be done to better evaluate the postulated theory. The next section includes two experiments that were done to help test the validity of the aforementioned theory.

The Current Research

As can be seen, although some research has been done on excuse defenses, the focus has been almost exclusively on verdicts and opinions rather than on exploring theoretical explanations for juror decisions. The goal of the current research is to empirically examine how the current Attribution (Experiments 1 & 2) and Story Model theories (Experiment 2) may relate to jury decision making for different excuse defenses. To this end, two types of excuse defenses were chosen: Entrapment and Brain Damage (a variant of insanity). These two defenses were chosen for two reasons. First, they have both recently received a fair amount of media coverage as utilized defenses in actual cases. Second, they actually represent two separate areas for the origin of the excuse. As previously mentioned, a core component of the excuse defense is whether the criminal act is perceived as being intentional or not. When an excuse defense is being utilized, the defendant is claiming that something interfered with his or her ability to form said intent. When an entrapment defense is utilized, the source of the interference is the actions of the undercover agent, which is clearly something external. As a result, it is not hard to see
why a juror would be making an external situational attribution if they were to accept the excuse defense. With a brain damage defense on the other hand, the claim is not that some cause external to the person instigated their engagement in the wrongful action. Rather, the defense claims that the actions of the individual are due to some internal disposition or cause, but the normal functioning of these internal mechanisms has been impaired such that they do not reflect the true nature of the individual. This discrepancy may potentially be explained using folk psychological theories regarding the persistence of the self, particularly views of psychological essentialism as applied to the self (Lampinen et al., 2004).

A study by Lampinen and colleagues (2004) presented participants with a variety of scenarios in which something was altered about an individual. These scenarios ranged everywhere from amnesia to limb amputation to brain transplants. The authors found that in a number of circumstances the participants believed the ‘self’ persisted. There was considerable variability; however, depending on the changes, for example bodily continuity seemed particularly important. Loss of memory seemed important, but not as important as changes to personality.

Overall, even though the specific case of brain damage used in the current studies was not examined, the Lampinen et al. (2004) study provides evidence that laypersons may view a persistence of self, separate from changes even to the brain. This in turn led to the following predictions: 1) Attribution Theory would significantly impact participants’ decisions regarding the guilt of the defendant. 2) The way Attribution Theory has an impact would differ depending on the type of excuse defense such that for the entrapment defense defendants that exhibit high Consensus and high Distinctiveness would have more success (i.e. found not guilty), while for the brain damage defense defendants that exhibit low Consensus and low Distinctiveness would
be more successful. 3) Aspects of Pennington and Hastie’s (1986) Story Model would be utilized by participants for making their choices.

To test these hypotheses, two experiments were performed. In Experiment 1, participants were provided with a standard trial summary in which a defendant is accused of purchasing stolen property. The summaries included all the relevant information from a trial and differed based on the type of defense utilized and aspects of Attribution Theory. Experiment 2 expanded on the previous study by utilizing a card selection task in which participants were given an abridged trial summary and offered the choice of which evidence they wished to see.

**Experiment 1**

The purpose of Experiment 1 was to examine two separate types of excuse defenses: Entrapment and Brain Damage. This experiment also explored how the three components of Kelley’s (1971) model of Attribution interact with these two types of defenses. To accomplish this, participants read a vignette about a hypothetical trial and played the part of a mock juror. Given the previous discussion, it was expected that the aspects of Kelley’s model that would contribute to the success of the excuse would differ systematically depending on the type of defense used. It was predicted that for Entrapment, high Consensus and high Distinctiveness would lead to a greater number of acquittals, a pattern that according to Kelley would result in a circumstance attribution. Meanwhile, for the Brain Damage defense, low Consensus and low Distinctiveness would lead the defense to be more successful. This pattern according to Kelley would result in a person attribution, however, as mentioned before, the participants may view these internal attributes as separate from the individual’s “true self”.

Also included in Experiment 1 was a scale designed to assess participants’ Crime Control versus Due Process Orientations (CCDPO, Liu & Shure, 1993). Participants’ CCDPO has been
shown to have a highly significant effect on verdicts in cases involving the Entrapment defense (Peters, Lampinen, & Malesky, 2012). A similar importance is expected for the Entrapment defense in the current study. It is possible that a similar effect may be found for participants who view a trial involving a Brain Damage excuse defense; however, to date there has been no research specific to the effects of CCDPO on these sorts of cases. Therefore, the importance of participants’ CCDPOs in the Brain Damage trial were unclear.

**Method**

**Participants.** This experiment consisted of 473 community participants recruited over the Internet via the online site Mechanical Turk. All participants were paid 15 cents for their participation in the study. In order to be included in the analysis, the participants were required to have answered three very simple comprehension questions correctly. Fifty participants (10.6%) failed to do so and were excluded from the analysis. Of the remaining 423 participants, a slight majority were female (63.6%) and the average age was 34.16 ($SD = 13.16$) years old. The participants claimed mostly to be moderate (32.2%) or moderately liberal (24.6%) in their political beliefs. Only a small proportion claimed to be liberal (24.6%), moderately conservative (13.0%), or conservative (10.9%). A small number had actually served on a jury in the past (14.4%) and the vast majority had no formal legal training (90.3%).

**Design.** A 3 (Defense Type: Entrapment, Brain Damage, Control) X 2 (Consensus: High, Low) X 2 (Distinctiveness: High, Low) between-subjects design was used. The Defense Type variable was designed to directly examine differences in verdicts based on the type of excuse defense utilized. In the Entrapment condition, the defendant attempted to utilize an entrapment defense, claiming that his actions were caused by the undercover officer. In the Brain Damage condition, the defendant made the claim that due to a previously incurred brain
injury, he was prone to impulse control problems. Finally, the control condition was identical to the Brain Damage condition except the defendant had no brain damage and utilized no excuses.

The other two variables were designed to examine the Consensus and Distinctiveness aspects Kelley’s (1971) Attribution model. Each variable consisted of both a high and a low condition. It was decided not to include a third “No information provided” control condition for each of the three aspects, because it is likely that when participants were not explicitly provided the information, they would infer the information on their own. In essence, instead of being a control condition, it would have acted as a free varying condition which could potentially confound the results. It was also decided not to include Consistency for the reason that an excuse defense would be extremely unlikely in the case that the defendant committed the same crime under the same circumstances. The Consistency condition also ran the risk of the added issue of “repeat offenders” which may cause a negative opinion of the defendant separate from the trial at hand.

Materials and procedure. All participants were provided with a link to an online survey site where they were presented with a consent form. Following the acceptance of the consent form, the participants were directed to the webpage where demographic information was collected. After completing the demographic questionnaire, participants were presented with a trial summary (see Appendix 1 for example) involving a defendant accused of purchasing stolen property (a stolen bicycle). The defendant attempted to utilize one of two types excuse defenses: Entrapment or Brain Damage. In the Entrapment defense trial, the defendant purchased the bicycle from an undercover police officer during a sting operation, while in the Brain Damage defense trial he purchased it from a thief who was already under surveillance. In both cases, the defense purported that the defendant lacked the ability to form intent, a requirement to be found
guilty. In the Entrapment defense condition, the defense lawyer asserted that his client’s ability to form intent was impaired by the actions of the police officer. Meanwhile, in the Brain Damage condition, the defense lawyer claimed that the defendant’s ability to form intent was impaired by brain damage he had previously incurred earlier in his life.

The summary had all the components of a typical trial, including both sides’ opening and closing statements, the calling of witnesses, the presentation of evidence, and the providing of judicial instructions. The witnesses consisted of the seller of the bicycle for the prosecution, and the defendant himself for the defense. The main evidence presented consisted of the recorded conversation between the defendant and the seller of the bicycle.

Also included in the summary were variations of the Consensus and Distinctiveness aspects of Kelley’s (1971) Attribution Theory. Both of the aspects were interspersed in the presentation of evidence. For Consensus, a statement was made concerning the prevalence of individuals arrested in the same situation for the same crime, either a significant number had been arrested (high consensus) or only a small number had been arrested (low consensus). For Distinctiveness, the statements differed depending on the type of defense utilized. In the trials where the Entrapment defense was used, a statement indicated whether the defendant had a previous pattern of criminal activity (low distinctiveness) versus being a model citizen (high distinctiveness). The same statement was used for the Control condition in which the defendant did not try to use a defense. Meanwhile, for the Brain Damage condition, the participant read statements made by a doctor regarding previous behavior patterns of the defendant. The defendant either had consistent difficulties with impulse control (low distinctiveness) or showed no previous difficulties (high distinctiveness).
Following the reading of the trial summary, participants were first asked a few very easy multiple choice comprehension questions as a manipulation check to make sure they actually read the summary (What was the defendant charged with?; What was the primary piece of evidence presented?; What was the object of central importance for the trial?). Afterwards, they were prompted to make a decision on how likely they would be to find the defendant guilty (Guilt Ratings) on a scale of -3 (very unlikely) to +3 (very likely). They were also asked to make an absolute judgment of guilty or not guilty and to provide an indication of their confidence in this verdict. At this time, as a manipulation check, participants were asked to answer the following four questions regarding their views of the case participants: How responsible was the defendant for his actions?, to what extent were the defendant’s actions persuaded by law enforcement officials (reverse scored)?, to what extent was the defendant motivated to solicit a minor prior to this event?, and to what extent would the law enforcement official’s actions persuade an average person to commit the offence (reverse scored)? Each of these questions was responded to on a 7-point likert scale (1=not at all – 7=completely). These questions were combined to provide an Attribution Score with higher scores indicating more attribution of responsibility to the defendant. Finally, participants completed two questionnaires designed to tap their Crime Control/Due Process Orientation (CCDPO, Liu & Shure, 1993). The first was the Procedural Due Process Scale (PDPS), which examined the importance participants placed on members of the legal system following the proper procedures in obtaining evidence or running a trial. The second scale was the Due Process versus Crime Control Scale (DPCCS), which measured the more ideological viewpoints of the participant regarding the goals of justice system. The entire task only took approximately five to ten minutes.

Results
**Manipulation check.** A manipulation check was first run to test the effectiveness of the Attribution manipulation on altering participants Attribution of Responsibility to the defendant. Given that it was hypothesized that Attribution would act differently depending on the type of defense utilized, the two defenses were analyzed separately. A 2 (Distinctiveness) X 2 (Consensus) Between Subjects Factorial Analysis of Variance (ANOVA) was run with Attribution of Responsibility as the dependent variable. Neither the Attribution of Responsibility for the Entrapment Defense interaction ($F(2, 157) = 3.34, p = .069, \text{partial } \eta^2 = .021$), nor the Brain Damage Defense interaction ($F(2, 157) = 0.94, p = .334, \text{partial } \eta^2 = .006$) were significantly affected by the Consensus or Distinctiveness variables. Therefore, it was determined that the manipulation check failed, the two Attribution variables did not change participants’ Attribution of Responsibility to the defendant.

**Absolute verdicts.** An initial Binary Logistic Regression was run with the demographic variables as predictors and Verdict as the dependent variable. None of the demographic variables were significant, so further analyses collapsed over these variables.

To analyze the raw verdicts, a hierarchical binary logistic regression was utilized (see Table 1 for logistic regression results). Included in the first step of the regression were the three primary variables of Defense Type (dummy coded), Consensus, and Distinctiveness. The second step included the two-way interactions for the three primary variables and the third step included the three-way interactions. Step one of the regression was significant, $\chi^2_{\text{step}} (4) = 23.72$, $Nagelkerke R^2_{\text{step}} = 0.07$, $p < .001$. There was a significant effect of the Defense Type variable for both dummy codes (Brain Damage $p = .030$, Entrapment $p < .001$). Participants were more likely to find the defendant guilty in the Control condition (65.7%) than the Brain Damage condition (53.1%) and the Entrapment condition (37.9%). The two Attribution variables had no
significant effects. Step two of the regression was not significant, $X^2_{step} (5) = 7.97$, Nagelkerke $R^2_{step} = 0.02$, $p = .158$. There was, however, a significant interaction between the Consensus variable and the Defense Type dummy code for Brain Damage ($p = .05$). Only participants given the Brain Damage Defense, but not the other two defenses, were affected by Consensus. The High Consensus group (45.7%) was more likely to find the defendant guilty than participants in the Low Consensus group (60.3%). There was also a marginally significant interaction between the Distinctiveness variable and the Defense Type dummy code for Brain Damage ($p = .081$). Similar to Consensus, only participants presented with the Brain Damage Defense, but not the other defenses, were affected by Distinctiveness. Participants in the High Distinctiveness group (51.4%) were more likely to find the defendant guilty than participants in the Low Distinctiveness group (54.8%). There were no other significant two way interactions.

Step three of the regression was also not significant, $X^2_{step} (2) = 0.86$, Nagelkerke $R^2_{step} = 0.01$, $p = .65$. There were no significant three way interactions.

**Guilt ratings.** A 3 (Defense Type) X 2 (Consensus) X 2 (Distinctiveness) Between-Subjects Factorial ANOVA was run on the dependent variable Guilt Ratings. Higher Guilt Ratings indicated the participants’ likelihood of choosing a guilty verdict. The Defense Type variable had a significant main effect on participants’ Guilt Ratings, $F(2, 411) = 19.19$, $p < .001$, partial $\eta^2 = .085$. Post-hoc Tukeys indicated that both the Brain Damage ($M = 0.20$, $SE = 0.15$, $p = .005$) condition and the Entrapment ($M = -0.46$, $SE = 0.15$, $p < .001$) condition resulted in significantly lower Guilt Ratings than the Control ($M = 0.89$, $SE = 0.15$) condition. The Brain Damage condition also resulted in significantly higher Guilt Ratings than the Entrapment condition ($p = .006$). Both the Consensus ($F(1, 411) = 0.07$, $p = .788$, partial $\eta^2 = .001$) and
Distinctiveness \((F(1, 411) = 1.36, p = .245, \text{partial } \eta^2 = .003)\) variables were non-significant on their own. There were no significant interactions.

**Confidence.** Also assessed was participants’ confidence in their respective verdicts. Given that the guilty and not guilty verdicts are opposites the independent variables could potentially have different consequences. As a result, each verdict was analyzed separately using a 3 (Defense Type) X 2 (Consensus) X 2 (Distinctiveness) Between-Subjects Factorial Analysis of Variance with Confidence as the dependent variable. For participants that selected Not Guilty, there was a main effect for Defense Type, \(F(2, 190) = 6.19, p = .002, \text{partial } \eta^2 = .061.\) Post-hoc tests revealed that the Entrapment \((M = 7.96, SE = 0.21)\) defense resulted in higher confidence in Not Guilty verdicts than both the Brain Damage \((M = 7.11, SE = 0.24, p = .007)\) condition and the Control condition \((M = 6.87, SE = 0.28, p = .002).\) Neither the Consensus \((F(1, 190) = 0.01, p = .93, \text{partial } \eta^2 < .001)\) nor Distinctiveness \((F(1, 190) = 2.32, p = .129, \text{partial } \eta^2 = .012)\) variables had a significant main effect.

There were also two significant two-way interactions for participants that voted Not Guilty. The first interaction was between Defense Type and Consensus, \(F(2, 190) = 3.60, p = .029, \text{partial } \eta^2 = .037.\) Post-hoc tests of the interaction revealed that for the Brain Damage condition, when participants were presented with a trial involving high Consensus information \((M = 7.57, SE = 0.36)\) participants were significantly less confident in their Not Guilty verdict than when they were presented with a low Consensus trial \((M = 6.65, SE = 0.31, p = .049).\) Also a marginally significant interaction was found with participants in the Entrapment condition, such that participants who read the trial involving high Consensus information \((M = 7.59, SE = 0.28)\) were less confident in their Not Guilty verdicts than participants who read the low Consensus version \((M = 8.34, SE = 0.30, p = .061).\) The second interaction was between
Defense Type and Distinctiveness, $F(2, 190) = 5.42, p = .005$, partial $\eta^2 = .054$. Post-hoc tests of the interaction revealed that for the Control condition, when participants were presented with a trial in which the defendant’s actions were less distinctive ($M = 5.94, SE = 0.45$) the participants were less confident in their Not Guilty verdict than participants in the trial in which the defendant’s actions were highly distinctive ($M = 7.89, SE = 0.35, p = .002$). No other interactions were significant.

For participants that selected Guilty, there was a significant main effect for Defense Type ($F(2, 209) = 5.17, p = .006$, partial $\eta^2 = .047$). Participants in the Brain Damage condition ($M = 7.69, SE = 0.18$) had significantly lower confidence in Guilty verdicts than participants in the Control condition ($M = 8.49, SE = 0.17, p = .002$). The main effects of Consensus ($F(1, 209) = 0.15, p = .703$, partial $\eta^2 = .001$) and Distinctiveness ($F(1, 209) = 0.04, p = .834$, partial $\eta^2 < .001$) were not significant.

For Guilty verdicts, there was also a significant three-way interaction between Defense Type, Consensus, and Distinctiveness, $F(2, 209) = 5.43, p = .005$, partial $\eta^2 = .049$). Post-Hoc comparisons revealed that when Consensus was high and Distinctiveness was low, participants in the Brain Damage condition ($M = 7.15, SE = 0.35$) were significantly less confident in their Guilty verdicts than participants in the Entrapment ($M = 8.54, SE = 0.44, p = .038$) and Control conditions ($M = 9.17, SE = 0.32, p < .001$). No other interactions or comparisons were significant.

**Crime Control Due Process Orientation.** In order to examine the effects of participants’ Crime Control/Due Process Orientation (CCDPO) on their verdicts, a hierarchical multiple logistic regression was run with the primary three independent variables in the first step, the two Crime Control/Due Process Orientation scales entered in the second step, and the
interactions between the CCDPO scales and the trial types entered on the third step. The results of Step One were identical to the first step mentioned above in the Verdicts analysis section. The second step of the regression was also significant ($\chi^2_{step}(2) = 11.08$, Nagelkerke $R^2_{step} = .03$, $p = .004$). Further analyses revealed that both the PDPS and the DPCCS questionnaires were significant (see Table 2 for the logistic regression table). It should be noted, that even in the second step, the Defense Type variables were still highly significant, indicating an effect all to themselves separate from the participants CCDPO. Finally, the third step of the regression was not significant ($\chi^2_{step}(4) = 7.45$, Nagelkerke $R^2_{step} = .02$, $p = .134$), however, the interaction between one of the CCDPO scales, the Procedural Due Process Scale, and the Entrapment Defense was significant. Individuals who placed a higher importance on following the rules of due process were more likely to find a defendant Not Guilty when the Entrapment Defense was utilized. This interaction was further examined by comparing the correlations between CCDPO and verdicts for the two verdict types separately. A Spearmans’ correlation revealed that for the Entrapment defense, there was a weak significant negative correlation between the CCDPO scales and verdicts for the DPCCS scale ($r(161) = -0.17$, $p = .029$), however, not for the PDPS scale ($r(161) = -0.14$, $p = .075$). For the Brain Damage defense, neither the DPCCS scale ($r(156) = -0.08$, $p = .326$), nor the PDPS scale ($r(156) = -0.01$, $p = .901$) were significantly correlated with verdicts. The correlations for each scale were then compared using a z-test. The correlations were not significantly different from each other for neither the PDPS scale, $z(317) = 1.15$, $p = .250$, nor the DPCCS scale $z(317) = 0.81$, $p = .418$.

Discussion

The goal of Experiment 1 was to examine how aspects of Attribution Theory may differentially affect two different types of excuse defenses: Entrapment and Brain Damage. In
general, participants seemed to at least prefer when defendants attempted some sort of excuse defense rather than the Control condition which is somewhat promising. With regard to the Attribution variables, it was hypothesized that information indicating high consensus and high distinctiveness would be more successful for defendants utilizing the Entrapment Defense. Meanwhile, for the Brain Damage Defense, it was hypothesized that low consensus and low distinctiveness would result in a greater acquittal rate. There was a significant problem with the sample obtained from Mechanical Turk, however. Overall, there were a very high number of participants eliminated for failing three very simple comprehension questions. This indicates that a number of the participants did not read the summary at all (and were removed from the analysis). Of those that actually got the questions correct, there is a high likelihood that a significant number also did not read the summary very closely as can be seen by the failed manipulation check. Given all of this, any conclusions from the above analyses are highly suspect.

That being said, the hypothesis was partially confirmed when looking solely at participant verdicts. For the Brain Damage Defense, both low Consensus and low Distinctiveness resulted in more Not Guilty verdicts, however, no effect was found for the Entrapment Defense. This pattern also did not persist with regard to Guilt Ratings where there was only a significant main effect of Trial Type in which the Control Defense resulted in significantly higher Guilt Ratings. With regard to Confidence in Verdicts we again get a partial confirmation of the hypothesis. For Not Guilty verdicts, High Consensus significantly lowered participants’ confidence in their verdicts for the Brain Damage Defense; however, High Consensus also lowered participants’ confidence in verdicts for the Entrapment Defense. It is unclear why participants acted in this way. It could be speculated that perhaps participants were
using a self-serving bias in that when more people were arrested for the crime, they attempted to distance themselves from the criminals and it made them question their Not Guilty verdicts. Also, somewhat contrary to the hypothesis, Distinctiveness only had an effect on the Control condition, and this could have simply been an example of the participants being more lenient on the defendant with less of a criminal record. For Guilty Verdicts, again there was partial evidence for the hypothesis, with low Distinctiveness resulting in less confidence in a guilty verdict, however, only when Consensus was high, which is counter-intuitive.

Finally, one of the strongest predictors in the results above was participants’ Crime Control versus Due Process Orientation. It washed out all other variables except the Defense Type variable. This makes sense, in that if the participant barely read the summary, they are likely to be driven by their previous beliefs toward Excuse Defenses in general which would likely be highly susceptible to their Crime Control versus Due Process Orientation. This is especially true with Entrapment, where an interaction exists with participant views on the importance of procedural due process. Individuals who stress the importance of following proper legal procedures are likely to be more accepting of a defense that focuses on the actions of law enforcement. Despite the problems with the sample, Experiment 1 still has some potential applied implications that will be discussed more in depth later.

**Experiment 2**

Experiment 1 was focused on how potential jurors might utilize evidence related to Attribution Theory differently depending on the type of excuse defense used. However, Experiment 1 was not able to tell us anything about the relative importance of different types of evidence to potential jurors. Nor was it able to tell us anything about the potential cognitive processes going on in the jurors’ minds. Is there any particular type of evidence that is
particularly necessary in a juror’s eyes? At what point does the juror have enough evidence to make a decision? Experiment 2 attempted to answer these sorts of questions utilizing a card selection task similar to one utilized by Payne (1976) to examine consumer decision heuristics.

In his study, Payne (1976) wanted to determine the pathways individuals go through when making a decision. To accomplish this, the experimenter presented participants with “information boards” concerning single bedroom apartments that the individual had to choose between. On the board were a set of labeled envelopes from which the participant pulled a card that provided information on different things the individual would be interested in, for example price or noise level. The participant could choose the information in any order and could choose to make a decision at any time. This revealed the relative importance of each piece of information. Experiment 2 used a similar paradigm, but modified for a jury decision making task like the one in Experiment 1. It was expected that participants would choose what they believe to be the most important evidence to making a decision first. Given that the participants were attempting to determine whether the defendant was responsible for his actions, it was predicted that participants would lend higher weight to evidence related to Attribution Theory. It was also predicted that given the differences in the two defenses a different pattern of importance would arise for the evidence depending on the type of defense.

**Method**

**Participants.** This experiment consisted of 104 university student participants recruited from the subject pool at the University of Arkansas. Participants received partial course credit for completing the experiment. Three participants were dropped from the analysis due to failing to understand the procedure. Of the remaining 101 participants, 64 (63.4%) were female and the average age was 19.76 (SD = 3.88) years old. The vast majority (81.2%) identified as Caucasian,
with only 3% identifying as African American, 5% identifying as Hispanic, 6% as Asian, and 4% as Other (one participant chose not to respond). Only three participants claimed to have actually served on a jury before.

**Design.** A 2 (Defense Type: Entrapment, Brain Damage) X 2 (Likely Verdict: Guilty, Not Guilty) X 6 (Information Type: Pure Facts, Coherence, Attribution Theory: Consensus, Attribution Theory: Distinctiveness, Opening Statements, Foils) mixed-factorial design was used. The Defense Type variable was identical to the one utilized in Experiment 1, except the control condition was left out to decrease the number of necessary participants. The Likely Verdict variable refers to the verdict all the evidence available was likely to push the participant to make. In other words, the evidence was stacked (based on previous Story Model and Attribution Theory research) in favor of one side, either the prosecution or defense. For example, in the trial that favors the prosecution, the prosecution’s evidence was more coherent and plausible, while the defense’s was not. This variable was necessary to examine the relative importance of each of the types of trial evidence with regard to making a guilty verdict or a not guilty verdict. It was possible that the two verdicts may have different information that was important to the mock jurors. Both the Defense Type and Likely Verdict variables were between-subjects variables.

The Information Type variable was a within-subjects variable and consisted of different types of evidence that could have been chosen by the participant. Pure Facts cards consisted of items that were completely factual and relevant to the trial, however do not appear to have a direct theoretical underpinning, for example, the fingerprints of the defendant being found on the bicycle. Coherence cards consisted of items that were directly or indirectly related to the Coherence facet of Pennington and Hastie’s (1986) Story Model. For example, the defendant
claimed that he did not need a bicycle, despite the fact that he is a bicycle delivery boy and his bicycle was in disrepair. The Attribution cards were directly related to aspects of Kelley’s (1971) model. These were separated into the same two categories as in Experiment 1: Consensus and Distinctiveness. The Opening Statement cards were solely the opening statements made by either the Defense Attorney or the Prosecuting Attorney. While not “evidence” per se, it was thought it would be interesting to see if potential jurors considered the opening statements and what sort of emphasis they put on them. Finally, the Foil cards were information related to the trial, but that should be entirely irrelevant, for example, the name of the neighborhood where the alleged crime took place.

**Materials and procedure.** Participants were taken to an experiment room one at a time by a research assistant where they were asked to sign a consent form and fill out a demographics questionnaire. Once the participant completed the questionnaire, their attention was directed by the research assistant toward a large desk upon which a number of envelopes were placed. On the outside of each of the envelopes was a question that involved different pieces of evidence or aspects of the trial. Inside each card was the answer to the question written on the outside (See Appendix 2 for entire list of questions and answers). The envelopes were organized in a random order prior to the participant’s entry and in such a way as to all be clearly visible. The research assistant then handed an abridged trial summary to the participant. The trial summary was a truncated version of the one utilized in Experiment 1 (See Appendix 2). Instead of including all the parts of a trial, it only included the defendant’s name, what he was accused of, and a very basic outline of the crime.

The research assistant then read the following instructions out loud to the participant while they followed along on paper: “In this experiment you will be examining evidence from an
actual criminal court trial. The trial evidence has been reviewed by a panel of legal experts who have come to a consensus as to the correct verdict. You have been handed an outline of a trial and in front of you is a variety of possible evidence that could be presented in that trial. Your job is to play the part of a juror who must decide the guilt or innocence of the defendant. To accomplish this, you will choose which evidence you wish to examine one piece at a time from the envelopes in front of you. You have as long as you want and may choose any piece of evidence in any order; however, you are encouraged to think about your choices thoroughly before choosing. The goal is to come to the correct verdict in as few flips as possible.”

The trial outline and evidence varied depending on the type of excuse defense the defendant was utilizing: Entrapment or Brain Damage. The evidence within each of the envelopes also varied depending on whether the participant was in the Guilty or Not Guilty condition. The evidence was all related to the above mentioned within-subjects categories. Each envelope chosen was recorded by the research assistant, and a camera was set up to make sure no recording errors were made.

The above protocol required participants to examine the cards until they felt that they could make a decision. In order to prevent participants from making too hasty of a decision, a minimum number of eight cards was decided upon, however, this was not told to the participant beforehand. If the participant tried to make a decision before the required number was met, he or she was prompted by the research assistant saying “Now if you had to choose X more cards what would they be in order of importance,” where X was the number required for them to reach the required eight. Following the card selection task, participants were debriefed and dismissed.

Results
None of the demographic variables were significant, so further analyses were collapsed over them. To examine how participants chose which evidence to view, two different analyses were performed. One analysis examined how often each type of evidence was chosen to be viewed by the participants, while the other analysis examined the order relative order each type of evidence was chosen.

**Evidence chosen.** The first analysis identified whether each piece of evidence was viewed (1) or not (0). Then the number of evidence for each category was added together and divided by the total possible for that type of evidence. A Mixed Factorial Analysis of Variance was then run with the Type of Evidence as the Within Subjects Variable, Defense Type and Likely Verdict as the Between Subjects Independent Variables, and the average number of evidence chosen as the Dependent Variable. There was a main effect for Type of Evidence, $F(5, 485) = 53.63, p < .001$, partial $\eta^2 = .356$ (see Table 3 for means). Neither Defense Type ($F(1, 97) = 1.14, p = .289$, partial $\eta^2 = .012$) nor Likely Verdict ($F(1, 97) = 0.47, p = .497$, partial $\eta^2 = .005$) produced significant main effects.

More importantly, there was a significant interaction between Defense Type and the Type of Evidence $F(5, 485) = 4.23, p = .001$, partial $\eta^2 = .042$. To examine this interaction, a series of planned comparisons were performed. First the Defense Types were analyzed separately to explore differences between the Types of Evidence for both (see Table 4). For both the Brain Damage and Entrapment Defense, all types of evidence were chosen significantly more often than Filler evidence ($p < .001$), indicating that participants were at least taking the task seriously. For both defenses, participants also tended to want to view the opening statements. There were differences in the patterns between the two defenses however. For the Entrapment Defense, Consensus, Distinctiveness, and Coherence evidence were all selected significantly more often
than purely factual evidence ($p < .001$). Meanwhile, for the Brain Damage Defense condition, only Distinctiveness was selected significantly more often than purely Factual evidence ($p = .038$). Distinctiveness was also selected significantly more often than Consensus evidence ($p < .01$).

The interaction was further examined by comparing the importance of each type of evidence between the two types of defenses using a series of independent samples t-tests (see Figure 1). The only important difference between the two defenses was seen in Consensus evidence being selected significantly more often in the Entrapment Defense condition than in the Brain Damage Defense condition, $t(99) = 5.82, p < .001$, *cohen's d* = 1.16. Filler evidence was also selected more often in the Entrapment Defense condition, $t(99) = 2.08, p < .040$, *cohen's d* = 0.42, however, this is thought to just be an artifact of the tiny amount chosen in both conditions. Factual Evidence ($t(99) = 1.29, p = .202$, *cohen's d* = 0.26), Distinctiveness Evidence ($t(99) = 0.43, p = .669$, *cohen's d* = 0.09), Coherence Evidence ($t(99) = 0.96, p = .340$, *cohen's d* = 0.19), and Opening Statements ($t(99) = 0.53, p = .596$, *cohen's d* = 0.11) were not significantly different between the two defense conditions.

**Evidence rankings.** The second analysis examined the rank importance of the different types of evidence. If a piece of evidence was chosen first, it was assigned the number of the total possible cards (N). The second piece chosen was then assigned a number 1 less (N-1), and so on. For example, if there were 20 potential pieces of evidence possible, the first piece chosen was assigned a 20, the second a 19, and so on. Evidence not chosen was assigned a zero. A second Mixed Factorial Analysis of Variance was run with the type of evidence as the Within Subjects Independent Variable, Defense Type and Likely Verdict as the Between Subjects Independent Variables, and the evidence rank as the Dependent Variable. There was a main
effect for Type of Evidence, $F(5, 485) = 52.89, p < .001$, $\text{partial } \eta^2 = .353$ (See Table 5 for means), and Defense Type, $F(1, 97) = 5.87, p = .017$, $\text{partial } \eta^2 = .057$. Likely Verdict still did not produce a significant effect $F(1, 97) = 0.43, p = .017$, $\text{partial } \eta^2 = .057$.

Similar to the Evidence Chosen analysis, there was a significant interaction between Defense Type and the Type of Evidence $F(5, 485) = 3.79, p = .002$, $\text{partial } \eta^2 = .038$. To examine this interaction, the same series of planned comparisons were performed as in the first analysis. First the Defense Types were analyzed separately to explore differences between the Types of Evidence for both defenses (see Table 6). Results were almost identical to the Evidence Chosen analyses above. Again for both the Brain Damage and Entrapment Defense, all types of evidence were chosen significantly more often than Filler evidence ($p < .001$), indicating that participants chose the evidence in some sort of order on purpose rather than choosing by random. Also, participants placed a high emphasis for both defense types on the opening statements desiring to see them fairly early on in the process. The two defenses, however, differed in the pattern of relative importance participants placed on types of evidence. For the participants that viewed the Entrapment Defense trial, Consensus, Distinctiveness, and Coherence evidence were all ranked significantly more important than purely Factual evidence ($ps < .05$), however, none of the three were ranked significantly more important than each other. For the Brain Damage defense on the other hand, Distinctiveness once again took priority, being selected significantly higher than all other types of evidence except Coherence ($ps < .05$).

The interaction was further examined by comparing the average rankings of each type of evidence between the two types of defenses using a series of independent samples t-tests (See Figure 2). There were three significant differences between the two Defense Types. Similar to the Evidence Chosen analysis, Consensus ($t(99) = 6.96, p < .001$, $\text{cohen’s } d = 1.362$) and Filler
Evidence were ranked significantly higher for the Entrapment Defense than the Brain Damage Defense. Again the significant difference for Filler evidence is thought to be an artifact of the average rankings being so small. Finally, Coherence evidence was ranked significantly higher for the Entrapment defense than the Brain Damage Defense, $t(99) = 2.09, p = .039$, $\text{cohen's } d = 0.417$. Factual Evidence ($t(99) = 1.17, p = .245$, $\text{cohen's } d = 0.232$), Distinctiveness Evidence ($t(99) = 0.69, p = .491$, $\text{cohen's } d = 0.138$), and Opening Statements ($t(99) = 0.27, p = .791$, $\text{cohen's } d = 0.053$) were not significantly different between the two defense conditions.

**Discussion**

The purpose of Experiment 2 was to examine the preferences participants would have for different types of evidence in a trial. To accomplish this, a design was used in which participants were given a skeleton of a trial and allowed to choose the evidence they wished to see in order to come to a verdict as fast as they could. Based on the assumption that participants would choose the evidence they believed most important first, it was hypothesized that evidence related to Attribution Theory would be selected more often and earlier than other pieces of evidence. Significant evidence was found in favor of this hypothesis: Attribution Theory played a significant part in participants’ choices for evidence. More importantly, the pattern exhibited for each type of defense differed significantly.

Both the average number of times each type of evidence was selected as well as the average ranking for each type of evidence were examined. The patterns were highly similar. For the Entrapment Defense, Consensus, Distinctiveness, and Coherence evidence were all ranked significantly more important than purely Factual evidence. Meanwhile, for the Brain Damage Defense, Distinctiveness was key outstripping all other types of evidence except Coherence.
This makes sense in that while all three types of evidence are important when attempting to determine whether Entrapment occurred, really only evidence that seems to provide proof of the truth of the defendant’s disability should be important in a Brain Damage Defense. This includes evidence surrounding the sequence of events at the crime (Coherence), as well as evidence for how the defendant acts in other circumstances (Distinctiveness). Meanwhile, Consensus only seemed to matter for participants when they were presented with the Entrapment Defense. This also makes sense, because for Entrapment, whether others fall for the same sting operation could be an indicator that the police were out of line and tricked innocent individuals. However, for Brain Damage what does it matter to a juror if others are committing the same criminal act? All that matters is what this specific individual did, since he is claiming something specifically wrong with himself caused him to act that way. Overall, Experiment 2 was consistent with the hypothesis and more importantly provided a great deal of clarification for the initial theory which will be discussed below.

General Discussion

The goal of the current research was to examine potential theoretical models for how jurors would make decisions in a trial where an excuse defense was utilized. In an excuse defense, the juror has to go beyond simply determining whether a defendant committed an illegal act or not, and make a decision as to whether the defendant should be held criminally responsible for the illegal act. Current theories of Jury Decision Making cannot account for this extra step in the process. Therefore, a theory that integrated Attribution Theory (Kelley, 1971) into the existing Story Model for jury decision making (Pennington & Hastie, 1986) was proposed. The veracity of this theory was tested in two separate experiments.
Experiment 1 was designed to examine the effects of different aspects of Kelley’s (1971) Attribution model within the context of a typical Trial Summary paradigm. Participants were presented with a vignette in which a defendant was accused of a crime and attempted to utilize either an Entrapment or Brain Damage excuse defense. It was hypothesized that evidence that indicated high consensus and high distinctiveness would be more successful for defendants utilizing the Entrapment Defense. Meanwhile, for the Brain Damage Defense, it was hypothesized that low consensus and low distinctiveness evidence would result in fewer guilty verdicts. Experiment 1 was plagued with participant issues, with a high removal rate for failing simple comprehension questions, and the high likelihood that a number of those who did pass the comprehension questions did not read the Trial Summary close enough to notice the manipulation. As a result, only limited evidence was found for the hypothesis. Future research should be done in a more controlled setting in an attempt to dissuade participants from skimming the Trial Summary.

That being said, Experiment 1 did yield some important findings. First, it was clear that participants preferred when defendants at least attempted some sort of Excuse Defense, as opposed to the Control condition where the defendant merely attempted to say he should not be held responsible. There are two possible explanations for this. First, perhaps participants were more convinced to decrease responsibility attributed to the defendant when an “official” Excuse Defense is presented by the defense counsel. Essentially the presence of an “official” defense could lend more credibility to the attempts of the defendant to decrease responsibility for his actions and thereby make the defense overall more effective. The other, more theoretically interesting, possibility is that when the defendant attempts to defer responsibility without providing an official Excuse Defense, the participants still viewed it as attempting to provide an
excuse, abet a very poor excuse. As previously mentioned, when an individual attempted to provide an excuse that was not accepted, the transgressor was viewed more harshly than if they had simply apologized (Schlenker et al., 2001). In the case of the current research, it is possible that the Control condition resulted in a harsher judgment by the participants who viewed it as a failed excuse. Future research could examine this by having a second control condition where for example the defendant offered an apology instead of attempting to defer responsibility.

The second important finding of Experiment 1 was the overall importance of participants’ Crime Control/Due Process Orientation (CCDPO). The participants’ CCDPO overwhelmed all other variables except the general effect of what type of Excuse Defense was used. If one considers that many of the participants only partially read the Trial Summary, their previous world beliefs would hold the most sway on their verdicts. This makes sense when considered in the context of Snyder and Ickes’s (1985), strong versus weak situations. In particular, participants’ views concerning their acceptance of Excuse Defenses would be highly important. Given that in Excuse Defenses the defendant is absolutely admitting to have committed the crime, an individual’s CCDPO is likely to have a major effect on their willingness to accept Excuse Defenses in general. In a strong situation, individuals are heavily influenced by environmental factors pertaining to the situation. However, in a weak situation, such as when an individual is not highly invested in a task, their personality tends to hold the most sway. This has important implications for potential jurors if they have little invested in the trial’s outcome and do not pay careful attention to the trial. While one may hope that all jurors would pay close attention at all times in a trial, in all likelihood this is not the case. Jurors will at times lose focus for various reasons, be it that they are overwhelmed by the sheer amount of discourse between the two sides, or that they simply do not care. The above findings would suggest that in an
Excuse Defense trial this is of particular importance when one is attempting to overcome juror prejudices against the type of defense in general. Future research should examine this possibility. In conclusion, while Experiment 1 was plagued by participant issues it did result in some interesting theoretical and practical implications.

The purpose of Experiment 2 was to examine potential jurors’ preferences for different types of evidence in an Excuse Defense trial. To accomplish this, a novel paradigm was created in which participants were given a skeleton of a Trial Summary, and were allowed to select the evidence they wished to see in order to make a decision. Recall, in a trial involving an Excuse Defense, the juror must make a verdict based on whether or not they believe the defendant should be held responsible for their crimes. Given this, it was hypothesized that evidence related to Attribution Theory would be selected more often and earlier than other pieces of evidence. Strong evidence was found in favor of this hypothesis. For Entrapment, both Consensus and Distinctiveness information was important; however, when the defendant was attempting a Brain Damage Defense, Distinctiveness evidence was deemed most important. Not only was this consistent with the hypothesis, it provides some evidence to the initial overarching theory proposed in the introduction.

**Application to the Proposed Theory**

Recall the initially proposed theory added another principle to Pennington and Hastie’s (1988) Story Model involving a step where the participant must make an Attribution of Responsibility. The current research provides strong evidence for this. Experiment 1 indicated that, when only partially paying attention, potential jurors will be strongly influenced by their previous views concerning Crime Control versus Due Process Orientation. That jurors will utilize their previous world views is a critical component of the Story Model. As a result, despite
the problems with the sample in Experiment 1, it did help to provide some evidence for basic Story Model mechanisms. Furthermore, it perhaps could indicate some of the boundaries of manipulating potential jurors’ verdicts in an Excuse Defense trial. In other words, are some previous beliefs about Excuse Defenses so pervasive that they overwhelm all the other evidence in the trial? For example, in the previously mentioned study on Online Sting Operations (Peters et al., 2012), the tendency was to find the defendant guilty regardless of the circumstances. In this case, it is possible that the previous world views of the participants caused them to feel that there was no good excuse for soliciting a minor over the Internet. Are there other circumstances this would occur? Is it possible to have the complete opposite with for example an Age Defense where the child is at an extremely young age? These are important areas for future research.

Even clearer evidence was shown for the proposed theory by Experiment 2. First of all, Experiment 2 found strong evidence for the importance still of information indicating the Coherence of the stories, which is a critical part of the Story Model (1988). This makes sense in that how well the evidence fits together is still important in an Excuse Defense trial, and in fact may play a role in how the jurors make their attributions of responsibility. Future research should examine this possibility. In Experiment 2 participants also showed a clear preference for attribution based evidence as predicted by the proposed modified theory. Furthermore, the findings helped to clarify specifically how Attribution Theory may work in Excuse Defense trials. While overall participants focused on aspects of Attribution Theory, the aspects they cared about most depended on the type of Excuse Defense used. With trials involving Entrapment, both how the defendant acted toward the other situations and how other individuals acted toward the same situation as the defendant mattered. In other words, if this was not normally how the defendant acted and others were also acting the same way to the sting
operation, then likely something about the sting operation was causing the defendant to act this way. However, for trials involving the Brain Damage Defense, only how the defendant acted in other situations really mattered. The potential jurors wanted to know if this was a constant behavioral pattern that clearly indicated some sort of mental deficit. It is possible that this sort of information could play into the plausibility of the defendant’s claims of brain damage (another aspect of the Story Model) and future research should examine this possibility. Overall, both Experiments 1 and 2 provide a great deal of evidence in favor of the proposed theory as well as a wealth of possibilities for future research.

**Other Possible Theories**

One recent popular theory in Jury Decision Making (Titcomb et al., 2012) has to do with the jurors tendencies towards Need for Cognition (NFC) and Need for Affect (NFA). NFC refers to an individual’s motivations toward rational thought and desires to organize his or her experiences in a “meaningful” manner (Cohen, Stotland & Wolfe, 1955). Individuals high in NFC tend to use the “central route of persuasion” and focus heavily on the relevant arguments being utilized. Meanwhile, individuals low on NFC utilize the “Peripheral route” and tend to focus more on surface information such as the physical attractiveness of the individual. From a jury decision making perspective this could indicate how much weight the juror is willing to give to the evidence presented by each side versus more superficial aspects of the trial such as the appearance of the defendant. NFA on the other hand refers to an individual’s motivations for seeking out or avoiding emotional experiences (Maio & Esses, 2001). Individuals high in NFA tend to be more emotionally extreme and react more to emotionally salient events. From a jury decision making perspective, an individual’s NFA could indicate how they will react to emotional arguments or evidence. For example, an individual high in NFA would be greatly
influenced by more emotion laden evidence, such as detailed photographs of a murder scene or testimony from a victim of a violent crime.

While the current research did not directly examine NFC or NFA, given their popularity with regard to jury decision making research, it would seem prudent to address their possible application to the current research. It is likely that both NFC and NFA could have a substantial impact on trials involving an Excuse Defense. For example, individuals higher in NFA would likely have a greater difficulty accepting an excuse defense for a particularly salient trial such as an Online Sting Operation. The current research specifically avoided such a scenario by choosing a relatively innocuous crime of purchasing a stolen bicycle. It is also possible that both NFC and NFA could drive individuals’ tendencies to accept or refuse excuses. For example, an excuse that focuses heavily on logic and rational thought may appeal to a jury member high in NFC. Meanwhile, an excuse defense heavily laden in emotional arguments may be more effective for individuals high in NFA. Future research should examine these possibilities.

An equally important way to further the currently discussed theory is to examine the findings from the lens of a different version of Attribution Theory. One theory of particular application to the current discourse is Jones and McGillis’s (1976) attempt to integrate Correspondent Inference Theory with Kelley’s ANOVA model which they refer to as an “Integrated Attributional Analysis”. In this integrated model, they specify two primary criteria that individuals will use to determine what sort of attribution to make regarding another individual’s actions: Category-based expectancies and Target-based expectancies. Category-based expectancies are similar to Kelley’s Consensus information, but expand the concept of Consensus to include both Stereotype information (expectations on how the individual should act based on his group affiliation) and Normative information (expectations concerning how
behaviors are created and maintained based on the sanctions imposed for deviating from the norm). The current research does not directly attempt to parse out these two separate areas, however, given the fact that in all the cases of a trial the individual is accused of violating norms this could be an important variable to examine. Also the effects of stereotypes is a common theme in jury decision making, so examining these stereotypes within the context of Excuse Defenses and how they relate to Attribution Theory could be informative. The second factor is Target-based expectancies which refer to inferences that are drawn from the knowledge an individual has about the target-person. The second factor essentially combines Kelley’s Consistency and Distinctiveness variables, which is actually exactly what the current research did in the Distinctiveness variable used above. Even though the Distinctiveness variable was looking at the defendant’s behavior toward other entities, it also included the temporal factor referred to in Consistency. This integrated factor is important when examining Excuse Defenses since Kelley’s Consistency and Distinctiveness can often be difficult to pull apart when referring to the defendant’s previous history. These two factors map on to the current research well and offer great promise for future interpretations; however, Jones and McGillis’s theory does not stop there.

Jones and McGillis (1976) also stress the importance of determining intent when an individual is attempting to make either an internal or external attribution. In previous incarnations of Correspondent Inference theory, the target’s behaviors were always assumed to be intentional and driven by a certain desired consequence. However, it is possible that the target is unaware of potential consequences and their intention is called into question. Jones and McGillis posit that Consistency information becomes particularly important in this case for determining intention. This can be seen in Experiment 2 as the combined
Consistency/Distinctiveness variable was selected often for both types of trials. This idea of determining intent extremely useful when examining Excuse Defenses since by the legal definition, the juror’s duty is to determine whether the defendant had the capacity to form intent. Overall, while the current research did not explicitly examine Jones and McGillis’s integrated theory, it does hold significant promise in the future for examining Juror Decision Making in the context of Excuse Defenses.

**Limitations**

There were several limitations of the current research. With regard to Experiment 1, the largest limitation is the aforementioned problems with the sample obtained in Experiment 1. Overall, a number of participants were eliminated for clearly not reading the summary at all, and it is likely that a number more only skimmed the summary at best. It is possible that the summary, even though it was only approximately three pages, was still too long in the context of an online population literally being paid pennies to participate. The easiest solution to this problem is simply to run participants in the laboratory where there are a considerable number of social norm pressures to read the summary thoroughly.

The second limitation of Experiment 1 is that it was simply a trial summary format. Trial summaries while easy to create and administer, are fraught with problems concerning ecological validity. The trial summaries even when taken seriously by the participant cannot truly encompass the different factors that go into a true trial. In a trial summary, there is no actual defendant, and therefore, no one will suffer if the participant makes a “wrong decision”. In other words, there is no possibility of sending an innocent man to jail, or of setting a guilty man free. As a result, trial summaries tend to lack much of the emotional components of a trial that may influence the juror’s verdicts. Also, a trial summary is a greatly shortened version of the trial
and does not accurately portray all the different things that go into a trial. It is highly unlikely that a real trial would ever be as short as the trial summary used, nor would any decent lawyer spend as little time in their opening and closing statements. Finally, the trial summary only focuses on the decision making of a single jury member. It does not take into account the fact that juries consist of multiple members that in turn have an effect on each other’s decision making processes. Future research should remedy this by using more ecologically valid methods.

There were also limitations with regard to Experiment 2. The methodology of Experiment 2 allowed participants to choose which evidence they wanted to see. The first limitation with Experiment 2 involves the lack of ecological validity of the task. In the real world, a juror does not get to select the evidence they want to hear, they are merely presented with what evidence is available and that the two sides want them to hear. Secondly, the task is based on the assumption that the evidence participants thought they wanted to see actually was indicative of the types of evidence that matter most to the juror when they actually have to make a decision. In other words, what the juror thinks is important may not actually be what is important in the course of an actual trial. For example, the importance of Consensus information is somewhat surprising considering the tendency of individuals to ignore consensus information as seen in the Fundamental Attribution Error, yet potential jurors seem to believe the information is important (Ross, 1977). Perhaps in an actual trial, the Fundamental Attribution Error would take over and this consensus information would no longer be focused on. Despite these limitations, Experiment 2 did provide a better understanding into at least what the participants themselves wanted to see as evidence and perhaps gave some insight into their basic cognitive processes.
Conclusion

Excuse Defenses require jurors to go beyond the typical trial and determine not whether a defendant committed an illegal act, but whether a defendant should be held responsible for their actions. These types of defenses are becoming increasingly utilized in the United States, however, despite this; little has been done to examine this different type of trial. In the current research, a new modified theory was proposed that added Attribution Theory to more traditional Jury Decision Making theories. Overall, a significant amount of evidence was found for this modified theory; however, a great deal more research is necessary. How jurors make decisions in a trial where a defendant utilizes an excuse defense promises to be a fruitful and important area of future research.
References


Appendix 1

Experiment 1: Example Trial Summary

What follows is a summary of trial proceedings in the case of Arkansas v. John Smith. The defendant, a 28-year-old male living in Rogers, Arkansas, is charged with Theft by Receiving, a Class C felony. Theft by Receiving is defined as receiving or purchasing an item that the individual knows or believes is stolen.

In his opening statement, the prosecutor claimed that the evidence would show that on March 23, 2011, John Smith, knowingly and willingly purchased a bicycle that he believed was stolen. Smith, who delivers takeout via bicycle for a living, was approached by Robert Doled, a bicycle thief under surveillance by the police attempting to sell a stolen bicycle which was valued at approximately $500.

Following a brief interaction between Smith and Doled, the defendant purchased the stolen bicycle and was promptly arrested. The prosecutor continued by explaining that the conversation in which the transaction occurred was recorded and that a portion of it would later be entered into evidence for the jury. The prosecutor claimed that the recorded conversation is sufficient evidence to convict Smith.

The defense attorney opened by admitting that Smith purchased the bicycle that he believed was stolen, but could not be held accountable for his actions due to receiving a traumatic brain injury at a young age that interferes with his ability to make decisions. The defense attorney claimed that the brain injury was such that Smith has extreme difficulty with impulse control. He stated that had his client not sustained the injury, Smith never would have purchased the stolen bicycle. The defense attorney continued by stating that in order to be convicted of a crime, the individual must have both committed and INTENDED to commit an illegal act. The defense attorney concluded his opening statement by telling the jury that due to the nature of his injury his client lacked the ability to form intent.

The first witness for the prosecution was accused thief, Doled. Doled explained that on March 23rd, he was attempting to sell a stolen bicycle when he approached Smith who had just made a delivery and was returning to his bicycle which was in poor condition. The prosecutor presented Doled with a copy of the recorded conversation which Doled acknowledged as accurate, then presented it to the jury:

```
Doled: Hey there. You a delivery boy?
Smith: Um, ya... do I know you?
Doled: Your bike is looking pretty beat up there, bet you could use a new one.
Smith: Er, I suppose so.
Doled: How bout I make you a deal on this brand new bike I got here.
Smith: What do you mean?
Doled: This bike is worth $500, I’ll sell it to you for cheaper.
Smith: Wow that does sound like a good deal, but what’s the catch?
```
Doled: No catch, just don’t ask me where I got it from.

*Smith:* What do you mean? Is it stolen?

Doled: Stolen is such a strong word, I prefer to say I permanently borrowed it without permission.

*Smith:* I see.

Doled: So you in or what?

*Smith:* I guess so.

Doled continued to explain that this type crime had occurred frequently as of late in the local area. Furthermore, almost every individual that had been approached by the thief had purchased the bicycle.

The second witness was Smith himself. Smith acknowledged that the conversation did indeed take place and that he did attempt to purchase the bicycle; however, he claimed he was pressured to purchase it by the seller, Doled. Smith stated he had no intention of purchasing a stolen bicycle and had never had any desire to.

Also entered into evidence was a written affidavit from Smith’s doctor indicating that Smith suffered from a traumatic brain injury to his Frontal Lobes. Furthermore, it was indicated that damage to this area has consistently been found in studies to interfere with impulse control. Previous behavioral records, however, indicate no significant impulse control problems.

The prosecutor began his closing statement by reminding the jury that by his own words, Smith admitted to committing the crime of purchasing stolen property. He continued by pointing out that even though a doctor indicated that Smith’s injury was indeed true, it was up to the jury to determine whether this excused Smith from responsibility for his actions.

The defense attorney began his closing statement by recalling the jury’s attention to the recorded conversation. He reminded them that Doled, the thief, pressured Smith into purchasing the bicycle. This, when coupled with his brain injury that interfered with his ability to make good decisions clearly created a situation in which his client committed an act he previously would have no intention of doing. Therefore, he should be found not guilty.

At this time, the judge told the jurors that all the relevant facts were in and it was their duty to deliberate until they reached a verdict. He then provided the jurors with instructions and released them to deliberate.
Appendix 2

Experiment 2 Summaries and Envelopes

Entrapment Summary
What follows is a summary of trial proceedings in the case of Arkansas v. John Smith. The defendant, a 28-year-old male living in Rogers, Arkansas, is charged with Theft by Receiving, a Class C felony. Theft by Receiving is defined as receiving or purchasing an item that the individual knows or believes is stolen.

On March 23, 2011, the defendant allegedly purchased a bicycle that he believed was stolen from one, Robert Doled, an undercover police officer. Smith has pled NOT GUILTY by reason of ENTRAPMENT. Entrapment is defined as an act of government agents or officials that induces a person to commit a crime he or she is not previously disposed to commit. According to United States law in order to be convicted of a crime, the individual must have both committed and intended to commit an illegal act.

Entrapment Guilty Envelopes
(1)[Who first approached the other individual?] - The defendant approached the undercover agent first and began the conversation.
(4)[What price did the agent ask for the bicycle?] - The undercover agent offered to sell the bicycle to the defendant for $400.
(7)[How many times did the agent offer to sell the bicycle before the defendant accepted?] - The undercover agent asked the defendant one time whether he wanted to buy the bicycle.
(8)[What was the defendant’s previous criminal record?] - The defendant has been convicted of a variety of other crimes, indicating a consistent pattern of criminal activity.
(9)[How many other individuals were arrested for the current sting operation?] - Despite frequent usage of the sting operation by the local police department, very few arrests have been made.
(11)[How was the agent dressed at the time the sting operation took place?] - The undercover agent was dressed shadily, with a black leather jacket, jeans, and a chain around his waist.
(12)[Where did the agent claim he obtained the bicycle?] - When the defendant asked the agent where the bicycle was obtained, the agent stated that it had been obtained by “less than legal means.”

Entrapment Not Guilty Envelopes
(1)[Who first approached the other individual?] - The undercover agent approached the defendant first and began the conversation.
(4)[What price did the agent ask for the bicycle?] - The undercover agent offered to sell the bicycle to the defendant for $50.
(7)[How many times did the agent offer to sell the bicycle before the defendant accepted?] - The undercover agent asked the defendant three times whether he wanted to buy the bicycle.
(8)[What was the defendant’s previous criminal record?] - The defendant has never been convicted of any other crimes, indicating a lack of any pattern of criminal activity.
(9)[How many other individuals were arrested for the current sting operation?] - This sting operation has been frequently used by the local police department and has resulted in the arrest of nearly every individual approached.
(11) [How was the agent dressed at the time the sting operation took place?]- The undercover agent was dressed normally, with a red sweater, jeans, and a brown belt.
(12) [Where did the agent claim he obtained the bicycle?]- When the defendant asked the agent where the bicycle was obtained, the agent was vague and avoided answering the question.

Entrapment Neutral Envelopes
(2) [How did the defendant appear at the trial?]: The defendant was well dressed in a suit with his hair combed neatly. He appeared bathed and had recently shaved.
(3) [How was the defendant dressed at the time the sting operation took place?]: The defendant was dressed in a delivery suit that was clean and well kept.
(5) [What was the prosecutor’s opening statement?]: The Prosecuting Attorney claimed the evidence would show that on March 23, 2011, John Smith, knowingly and willingly purchased a bicycle that he believed was stolen. He further claimed that the actions of the defendant had both the motivation and capacity to have purchased the bicycle and would have eventually sought to purchase a stolen bicycle even if he had never been approached by the undercover agent.
(6) [What was the defending lawyer’s opening statement?]: The defense attorney opened by admitting that Smith purchased the bicycle that he believed was stolen, but could not be held accountable for his actions because he was wrongfully entrapped. The defense attorney claimed that Doled went beyond reasonable methods in an attempt to trick Smith into a crime he was not predisposed to commit. He stated that had the sting operation never occurred, Smith never would have purchased the stolen bicycle.
(10) [How did the defendant act at the time of the arrest?]- When police arrested the defendant, he was compliant while still professing his innocence.

Brain Damage Summary
What follows is a summary of trial proceedings in the case of Arkansas v. John Smith. The defendant, a 28-year-old male living in Rogers, Arkansas, is charged with Theft by Receiving, a Class C felony. Theft by Receiving is defined as receiving or purchasing an item that the individual knows or believes is stolen.

On March 23, 2011, the defendant allegedly purchased a bicycle that he believed was stolen from one, Robert Doled, a criminal under surveillance at the time. Smith has pled NOT GUILTY by reason of a BRAIN INJURY. Smith's brain injury is such that he has difficulty with impulse control. According to United States law in order to be convicted of a crime, the individual must have both committed and intended to commit an illegal act.

Brain Damage Guilty Envelopes
(1) [What was the extent of the defendant’s brain damage?]: According to a medical expert, the defendant's brain damage was minor, and the location was such that it could potentially impair impulse control.
(2) [How did the defendant appear at the trial?]: The defendant was well dressed in a suit with his hair combed neatly. He appeared bathed and had recently shaved.
(3) [How was the defendant dressed at the time the alleged crime took place?]: The defendant was dressed in a delivery suit that was clean and well kept.
What price did the seller ask for the bicycle? - The bicycle thief offered to sell the bicycle to the defendant for $400.

What was the defendant’s previous criminal record? - The defendant has never been convicted of any other crimes, indicating a lack of any pattern of criminal activity.

How many other individuals were arrested for the current surveillance operation? - This surveillance operation has been frequently used by the local police department and has resulted in the arrest of nearly every individual under surveillance.

How did the defendant act at the time of the arrest? - When police arrested the defendant, he was angry and resisted arrest.

How was the seller dressed at the time the surveillance operation took place? - The seller was dressed normally, with a red sweater, jeans, and a brown belt.

Where did the seller claim he obtained the bicycle? - When the defendant asked where the seller had obtained the bicycle, the seller replied that he had just “randomly found it in the street”, to which the defendant laughed.

Brain Damage Not Guilty Envelopes

What was the extent of the defendant’s brain damage? - According to a medical expert, the defendant's brain damage was very significant, and the location was such that it could potentially impair impulse control.

How did the defendant appear at the trial? - The defendant was dressed in a wrinkled and tattered suit. His hair was messy and he appeared to have not shaved or bathed in several days.

How was the defendant dressed at the time the surveillance operation took place? - The defendant was dressed in a dirty red sweater that was frayed

What price did the seller ask for the bicycle? - The bicycle thief offered to sell the bicycle to the defendant for $50.

What was the defendant’s previous criminal record? - The defendant has been convicted of a variety of other crimes, indicating a consistent pattern of criminal activity.

How many other individuals were arrested for the current surveillance operation? - Despite frequent usage of this surveillance operation by the local police department, very few arrests have been made.

How did the defendant act at the time of the arrest? - When police arrested the defendant, he was confused and easily complied with law enforcement.

How was the seller dressed at the time the surveillance operation took place? - The seller was dressed in a professional authoritative manner, with a black suit, slacks, and dress shoes.

Where did the seller claim he obtained the bicycle? - The defendant made no attempts to ascertain the origins of the bicycle and seemed only confused when the seller stated he had “randomly found it in the street”.

Brain Damage Neutral Envelopes

What was the prosecutor’s opening statement? - The Prosecuting Attorney claimed the evidence would show that on March 23, 2011, John Smith, knowingly and willingly purchased a bicycle that he believed was stolen. He further claimed that the actions of the defendant had both the motivation and capacity to have purchased the bicycle and would have eventually sought to purchase a stolen bicycle even if he had never been approached by the undercover agent.

What was the defending lawyer’s opening statement? - The defense attorney opened by admitting that Smith purchased the bicycle that he believed was stolen, but could not be held
accountable for his actions due to receiving a traumatic brain injury at a young age that interferes with his ability to make decisions. The defense attorney claimed that the brain injury was such that Smith has extreme difficulty with impulse control. He stated that had his client not sustained the injury, Smith never would have purchased the stolen bicycle. The defense attorney concluded his opening statement by telling the jury that due to the nature of his injury his client lacked the ability to form intent.

Envelopes the same for both trial types

Guilty Envelopes
(2) [What was the condition of the defendant’s own bicycle?]- The defendant’s bicycle is in poor condition and appears to be in urgent need of repair.
(3) [What was the defendant’s own bicycle valued at?]- The defendant’s bicycle is initially valued at $150.
(4) [What was the defendant’s claimed reason for being at crime scene?]- The defendant claims he was in the area because he was taking the long way to a delivery site.
(6) [At what time of day did the alleged crime take place?]- The crime took place at approximately 8 PM, well after nightfall.
(10) [What was the defendant’s cellphone calling history?]- The defendant’s calling history for the day consisted of three relevant calls the first of which was to a bicycle repair shop, the second to a bicycle sales shop, and the third to his bank.

Not Guilty Envelopes
(2) [What was the condition of the defendant’s own bicycle?]- The defendant’s bicycle is in excellent condition and does not appear to be in need of any repair.
(3) [What was the defendant’s own bicycle valued at?]- The defendant’s bicycle is initially valued at $450.
(4) [What was the defendant’s claimed reason for being at crime scene?]- The defendant claims he was in the area because he was taking a shortcut on the way to a delivery site.
(6) [At what time of day did the alleged crime take place?]- The crime took place at approximately 3 PM, in the middle of the workday.
(10) [What was the defendant’s cellphone calling history?]- The defendant’s calling history for the day indicated no out of the ordinary calls.

Neutral Envelopes
(1) [What is the value of the stolen bicycle?]- The bicycle is valued at $500.
(5) [What is the color of the stolen bicycle?]- The bicycle was red with white stripes.
(7) [What was the location of the alleged crime?]- The crime took place in Whitenord residential subdivision, at the corner of William and Erickson.
(8) [What is the defendant’s eye color?]- The defendant’s eye color is brown.
(9) [What were the results of the fingerprint analysis?]- Fingerprints lifted from the handlebars of the stolen bike match those of the defendant.
(11) [What is the defendant’s hair color?]- The defendant’s hair color is brown.
(12) [How was the prosecuting attorney dressed at the trial?]- The prosecuting attorney was dressed professionally with a black suit jacket, red tie, and black slacks.
(13)[How was the defending attorney dressed at the trial?]- The prosecuting attorney was dressed professionally with a black suit jacket, red tie, and black slacks.

(14)[What is the defendant’s shoe size?]- The defendant wears a size 9 shoe.

(15)[Who was the presiding judge?]- The presiding judge was Justice Joshua Sweeney, who was 45 years old and was dressed appropriately for a judge.

(16)[What is the relationship status of the defendant?]- The defendant was single and had never been married.

(17)[What is the height of the defendant?]- The defendant is 5’10’’.

(18)[How many orders did the defendant deliver that day?]- The defendant delivered four orders that day.
Table 1. Logistic Regression analysis for absolute verdicts in Experiment 1.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>Wald’s $\chi^2$</th>
<th>$e^B$</th>
<th>95% CI</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: $\chi^2_{step} (4) = 23.72$, Nagelkerke $R^2_{step} = 0.07$</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense (Brain Damage)</td>
<td>0.53</td>
<td>0.25</td>
<td>4.70*</td>
<td>1.70</td>
<td>[1.05, 2.75]</td>
<td>.030</td>
</tr>
<tr>
<td>Defense (Entrapment)</td>
<td>1.16</td>
<td>0.25</td>
<td>21.33**</td>
<td>3.17</td>
<td>[1.94, 5.18]</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Consensus</td>
<td>0.11</td>
<td>0.20</td>
<td>0.28</td>
<td>1.11</td>
<td>[0.75, 1.65]</td>
<td>.600</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>-0.23</td>
<td>0.20</td>
<td>1.28</td>
<td>0.80</td>
<td>[0.54, 1.18]</td>
<td>.259</td>
</tr>
<tr>
<td><strong>Step 2: $\chi^2_{step} (5) = 7.97$, Nagelkerke $R^2_{step} = 0.02$</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consensus x Defense (Brain Damage)</td>
<td>-0.98</td>
<td>0.50</td>
<td>3.83*</td>
<td>0.38</td>
<td>[0.14, 1.00]</td>
<td>.050</td>
</tr>
<tr>
<td>Distinctiveness x Defense (Brain Damage)</td>
<td>-0.88</td>
<td>0.50</td>
<td>3.04</td>
<td>0.42</td>
<td>[0.16, 1.12]</td>
<td>.081</td>
</tr>
<tr>
<td>Consensus x Defense (Entrapment)</td>
<td>-0.38</td>
<td>0.51</td>
<td>0.55</td>
<td>0.69</td>
<td>[0.25, 1.85]</td>
<td>.459</td>
</tr>
<tr>
<td>Consensus x Distinctiveness</td>
<td>-0.50</td>
<td>0.51</td>
<td>0.98</td>
<td>0.61</td>
<td>[0.22, 1.64]</td>
<td>.323</td>
</tr>
<tr>
<td>Distinctiveness x Distinctiveness</td>
<td>0.49</td>
<td>0.41</td>
<td>1.42</td>
<td>1.62</td>
<td>[0.73, 3.61]</td>
<td>.234</td>
</tr>
<tr>
<td><strong>Step 3: $\chi^2_{step} (2) = 0.85$, Nagelkerke $R^2_{step} = 0.01$</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consensus x Distinctiveness x Defense (Brain Damage)</td>
<td>-0.82</td>
<td>1.00</td>
<td>0.68</td>
<td>0.44</td>
<td>[0.06, 3.12]</td>
<td>.410</td>
</tr>
<tr>
<td>Consensus x Distinctiveness x Defense (Entrapment)</td>
<td>-0.81</td>
<td>1.02</td>
<td>0.64</td>
<td>0.44</td>
<td>[0.06, 3.25]</td>
<td>.424</td>
</tr>
</tbody>
</table>

Note: *indicates $p<.05$ ** indicates $p<.001$
Table 2. Second step of Logistic Regression analysis for CCDPO scales in Experiment 1.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>Wald’s $\chi^2$</th>
<th>$e^B$</th>
<th>$e^B$ 95% CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: $\chi^2_{\text{step}} (2) = 11.08$, Nagelkerke $R^2_{\text{step}} = 0.03$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense (Brain Damage)</td>
<td>-0.59</td>
<td>0.25</td>
<td>5.55</td>
<td>0.56</td>
<td>[0.34, 0.91]</td>
<td>.018</td>
</tr>
<tr>
<td>Defense (Entrapment)</td>
<td>-1.24</td>
<td>0.26</td>
<td>23.25***</td>
<td>&lt;.29</td>
<td>[0.18, 0.48]</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Consensus</td>
<td>0.15</td>
<td>0.20</td>
<td>0.51</td>
<td>1.16</td>
<td>[0.78, 1.73]</td>
<td>.474</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>-0.24</td>
<td>0.20</td>
<td>1.38</td>
<td>0.79</td>
<td>[0.53, 1.17]</td>
<td>.240</td>
</tr>
<tr>
<td>PDPS</td>
<td>0.04</td>
<td>0.02</td>
<td>5.60*</td>
<td>1.04</td>
<td>[1.01, 1.07]</td>
<td>.018</td>
</tr>
<tr>
<td>DPCCS</td>
<td>-0.03</td>
<td>0.01</td>
<td>9.15**</td>
<td>0.97</td>
<td>[0.95, 0.99]</td>
<td>.002</td>
</tr>
<tr>
<td>Step 3: $\chi^2_{\text{step}} (4) = 7.05$, Nagelkerke $R^2_{\text{step}} = 0.02$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense (Brain Damage) X PDPS</td>
<td>-.045</td>
<td>0.04</td>
<td>1.63</td>
<td>0.96</td>
<td>[0.89, 1.02]</td>
<td>.202</td>
</tr>
<tr>
<td>Defense (Brain Damage) X DPCCS</td>
<td>.022</td>
<td>0.02</td>
<td>0.91</td>
<td>1.02</td>
<td>[0.98, 1.07]</td>
<td>.340</td>
</tr>
<tr>
<td>Defense (Entrapment) X PDPS</td>
<td>-.087</td>
<td>0.04</td>
<td>5.81</td>
<td>0.92</td>
<td>[0.85, 0.98]</td>
<td>.016</td>
</tr>
<tr>
<td>Defense (Entrapment) X DPCCS</td>
<td>.011</td>
<td>0.02</td>
<td>0.23</td>
<td>1.01</td>
<td>[0.97, 1.06]</td>
<td>.636</td>
</tr>
</tbody>
</table>

Note: *indicates p<.05 ** indicates p < .01 *** indicates p<.001
Table 3. Overall Mean (SE) Times Each Type of Evidence was Selected in Experiment 2.

<table>
<thead>
<tr>
<th>Evidence Type</th>
<th>Average Times Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual</td>
<td>0.366 (0.036)(^a)</td>
</tr>
<tr>
<td>Consensus</td>
<td>0.471 (0.019)(^ab)</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>0.538 (0.018)(^abc)</td>
</tr>
<tr>
<td>Coherence</td>
<td>0.516 (0.022)(^ad)</td>
</tr>
<tr>
<td>Filler</td>
<td>0.071 (0.011)(^abcde)</td>
</tr>
<tr>
<td>Opening Statements</td>
<td>0.634 (0.044)(^abcde)</td>
</tr>
</tbody>
</table>

*Note: Superscripts \(^a,b,c,d,e\) indicate significant within-group differences from each other \(p < .05\).*
Table 4. Mean (SE) Times Each Type of Evidence was Selected Based on Trial Type in Experiment 2.

<table>
<thead>
<tr>
<th>Evidence Type</th>
<th>Trial Type</th>
<th>Brain Damage</th>
<th>Entrapment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual</td>
<td></td>
<td>0.412 (0.055)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.320 (0.045)&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>Consensus</td>
<td></td>
<td>0.359 (0.024)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.583 (0.030)&lt;sup&gt;fg&lt;/sup&gt;</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td></td>
<td>0.546 (0.021)&lt;sup&gt;bc&lt;/sup&gt;</td>
<td>0.530 (0.030)&lt;sup&gt;fh&lt;/sup&gt;</td>
</tr>
<tr>
<td>Coherence</td>
<td></td>
<td>0.495 (0.029)&lt;sup&gt;bd&lt;/sup&gt;</td>
<td>0.536 (0.031)&lt;sup&gt;fi&lt;/sup&gt;</td>
</tr>
<tr>
<td>Filler</td>
<td></td>
<td>0.048 (0.008)&lt;sup&gt;abcde&lt;/sup&gt;</td>
<td>0.095 (0.021)&lt;sup&gt;g hij&lt;/sup&gt;</td>
</tr>
<tr>
<td>Opening Statements</td>
<td></td>
<td>0.657 (0.059)&lt;sup&gt;abde&lt;/sup&gt;</td>
<td>0.610 (0.066)&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Superscripts <sup>a,b,c,d,e,f,g,h,i,j</sup> indicate significant within-group differences from each other p < .05.
Figure 1. Average Times Each Type of Evidence was Selected in Experiment 2 Based on Trial Type.

Note: * p < .05 ** p < .001 for between group differences.
Table 5. Overall Mean (SE) Rank for Each Type of Evidence in Experiment 2.

<table>
<thead>
<tr>
<th>Evidence Type</th>
<th>Average Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual</td>
<td>8.59 (0.83)</td>
</tr>
<tr>
<td>Consensus</td>
<td>11.25 (0.40)</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>13.24 (0.42)</td>
</tr>
<tr>
<td>Coherence</td>
<td>12.21 (0.46)</td>
</tr>
<tr>
<td>Filler</td>
<td>1.55 (0.19)</td>
</tr>
<tr>
<td>Opening Statements</td>
<td>15.26 (1.12)</td>
</tr>
</tbody>
</table>

Note: Superscripts $^{a,b,c,d,e}$ indicate significant within-group differences from each other $p < .05$. 
Table 6. Mean (SE) Rank of Each Type of Evidence Based on Trial Type in Experiment 2.

<table>
<thead>
<tr>
<th>Evidence Type</th>
<th>Brain Damage</th>
<th>Entrapment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual</td>
<td>9.55 (1.28)\textsuperscript{a}</td>
<td>7.62 (1.04)\textsuperscript{a}</td>
</tr>
<tr>
<td>Consensus</td>
<td>8.45 (0.50)\textsuperscript{b}</td>
<td>14.07 (0.64)\textsuperscript{bh}</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>12.96 (0.48)\textsuperscript{abc}</td>
<td>13.53 (0.69)\textsuperscript{ac}</td>
</tr>
<tr>
<td>Coherence</td>
<td>11.27 (0.63)\textsuperscript{bcd}</td>
<td>13.16 (0.65)\textsuperscript{ad}</td>
</tr>
<tr>
<td>Filler</td>
<td>1.08 (0.19)\textsuperscript{abcde}</td>
<td>2.02 (0.34)\textsuperscript{abcde}</td>
</tr>
<tr>
<td>Opening Statements</td>
<td>15.55 (1.44)\textsuperscript{abde}</td>
<td>14.96 (1.70)\textsuperscript{ae}</td>
</tr>
</tbody>
</table>

Note: Superscripts \textsuperscript{a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z} indicate significant within-group differences from each other, \( p < .05 \).
Figure 2. Average Rank for Each Type of Evidence in Experiment 2 Based on Trial Type.

Note: * p < .05 ** p < .001 for between group differences.