2021

Veracious Verdicts: An Expansion of Cognitive-Experiential Self-Theory in Jury Decision-Making Using Attribution Theory

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VERACIOUS VERDICTS: AN EXPANSION OF COGNITIVE-EXPERIENTIAL

SELF-THEORY IN JURY DECISION-MAKING USING ATTRIBUTION THEORY

BY

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A thesis submitted in partial fulfillment of the requirements for the

Master of Arts

Major in Communication and Media Studies

South Dakota State University

2021

THESIS ACCEPTANCE PAGE

Jade Larson

This thesis is approved as a creditable and independent investigation by a candidate for

the master's degree and is acceptable for meeting the thesis requirements for this degree.

Acceptance of this does not imply that the conclusions reached by the candidate are

necessarily the conclusions of the major department.

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This thesis is dedicated to my Grandma, Darlene Bell Luther.

ACKNOWLEDGEMENTS

This accomplishment would not have been achievable without my unwavering support system. First, I would like to thank my advisor, Dr. Kathryn Coduto, who has taught me so much throughout this process. Thank you for your belief in my abilities, continuous encouragement, and helping me find my passion. Your guidance and patience pushed me to produce my best work. It was an incredible honor to be your first thesis advisee. Thank you to my committee members, Dr. Joshua Westwick and Dr. Vollan, for your invaluable feedback to improve my study.

Next, I want to acknowledge Dr. Joshua Westwick. Thank you for always believing in me, from my first course as an undergraduate student through the completion of my thesis. Your words of encouragement and continuous reminder to "teach like I am loved" made this experience like no other. I am grateful for your mentorship and friendship. Additionally, I owe gratitude to Dr. Nick Polavin for guidance on my study. Thank you for exceptional feedback throughout this process that made my study better.

Many people offered incredible support throughout this process who should be acknowledged: Alex Eigen, Nicholas French, Amber Turner, Kenzie Blosmo, my cohort, and many others who offered insight and helpful distractions. I would also like to acknowledge my life-long best friends Rachel Eickhoff, Ashton Elizabeth, and Cassie Wilebski for offering help, guidance, and love throughout this process.

Finally, to my sister, thank you for always being by my side and pushing me to be the best version of me. To my dad, thank you for your constant support, encouragement, and perfectly timed distracting phone calls. To my mom, thank you for loving me, laughing with me, and continuously inspiring me to be the best student, instructor, and person I can be. Thank you

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ABBREVIATIONS

CEST cognitive-experiential self-theory

LOC locus of control

ELM elaboration likelihood model

CRT cognitive reflection test

FAE fundamental attribution error

IPC internality powerful others and chance

REI rational experiential inventory

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ABSTRACT

VERACIOUS VERDICTS: AN EXPANSION OF COGNITIVE-EXPERIENTIAL

SELF-THEORY IN JURY DECISION-MAKING USING ATTRIBUTION THEORY

JADE E. LARSON

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As a pillar in our judicial system, the courts utilize almost ten million citizens each year for jury service. As a result, the courts are faced with issues of inconsistency and unpredictability. This study aims to examine some factors that significantly influence jury decision-making by investigating cognitive experiential self-theory (CEST) as a jury decision-making model, unified with attribution theory to better predict verdict outcomes. An online survey was distributed to 121 participants. The respondents were asked to read a civil trial case presentation; they were then randomly divided into two conditions (high and low unrelated detail eyewitness testimony). The testimonies had the same relevant information with a single sentence difference regarding the character of the witness. Finally, participants were asked to come to a verdict deciding guilt, liability, and monetary award. Analysis of the responses further confirmed CEST as a jury decision-making model. Participants who received the high unrelated detail eyewitness testimony were more likely to find the defendant not guilty. Analysis also showed participants with a stronger sense of external locus of control, those who rely on powerful others and chance, attributed higher liability to the defendant. The results indicate that irrelevant factors do have an impact on jury decision-making. Also, the individual difference and message factors have meaningful theoretical implications, as well as applicable jury selection and trial preparation implications.

CHAPTER 1

Introduction

Twelve people, one verdict, and copious amounts of research have yet to explain the reason why attorneys present sound, logical evidence and still lose the case. Citizens called to jury service fulfill their civic engagement duties (Cooper et al., 2006). Jury service is among the highest forms of power in a democracy granted by the founders to civilians, which is essential to promote fairness and education in the justice system (Justice & Meares, 2014). Previous research highlights that jury decision-making is important, but at times unpredictable. There are conflicting perceptions on the best information processing model for jury decision-making and, consequentially, questions of the quality of verdicts because of a variety of influential factors impacting jury verdict decisions of a case. The research here aims to determine how varying factors impact jury decision-making using the cognitive experiential model (Epstein, 1994). This chapter introduces the research by explaining the problem with the lack of cohesiveness in jury decision-making research, the background, the research objective, scope, and significance of studying those influential factors.

Almost ten million citizens report for jury service annually to courthouses across the country (Bose, Pal, & Sappington, 2019). Jury service, as a staple of the American court system will continuously call on citizens to make difficult decisions. Jury decision-making prediction strategies create effective efforts to understand verdict outcomes. Yet this system requires more research to accurately prepare, predict, and prosecute ethically in both criminal and civil courtrooms. Extensive jury decision-making research has yet to come to a unified theoretical framework to assure justice is served. The purpose of this

study is to gain a fuller understanding of the jury decision-making complexities, along with how the court system, attorneys, and involved parties can better predict verdict outcomes. Furthermore, studying jury decision-making through a communicative perspective can better equip attorneys during trial and witness preparation. To gain a better and deeper understanding of external influences, in-depth quantitative research is required. By focusing on the individual juror's information processing and loci of control, research can help develop a more unified theoretical framework, provide courtroom communication strategies, and aid attorneys and professionals in preparation and prediction.

Background of the Problem

Extant research incorporates a variety of decision-making models driving studies of jury decision-making. The varying use of different jury decision-making models has led to inconsistencies in the literature. Polavin (2019) researched the importance of a more consistent and better jury decision-making model to help make accurate predictions about jury decisions and aid trial preparation for attorneys in court. He articulated the difference between relevant and irrelevant factors that influence jury decision-making. Relevant factors of a case are the evidence, and facts of the case should be the only factors in decision-making (Lieberman, 2002). However, irrelevant facts, such as physical appearances, emotions, and member status, also influence decision-making. When proposing his preferred jury decision-making model, Polavin (2019) compared the Elaboration Likelihood Model (ELM) in contrast to Cognitive Experiential Self-Theory (CEST) as jury decision making models. ELM has two routes to persuasion: (1) central merits of the argument that require high elaboration with careful thinking or (2) low

elaboration aspects of the argument that the juror would have low motivation and ability to make judgments from (Petty & Cacioppo, 1986). The first route, or the central route, requires high elaboration focused on the merits of the argument itself, such as case evidence, data, and facts. The second route, or peripheral route, requires low elaboration to process details such as physical attributes, race, or gender. Thus, low levels of elaboration, not thoroughly processing information, result in the jury making judgments about the irrelevant factors of the case.

Similar to ELM, CEST is a dual-process model that includes two systems people use to make sense of the world. First, rooted in logic and evidence, the rational system is a slow analytical process. Second, in contrast, the experiential system is a quick and intuitive process that uses previous experiences to make decisions (Epstein, 1994). Polavin (2019) argues that CEST is a better decision-making model than ELM because irrelevant information such as physical attractiveness (Efran, 1974), socio-economic status (Mazzella & Feingold, 1994), gender, emotional cues, prior experiences (Lieberman, 2002), and pretrial publicity (Lieberman & Arndt, 2000) have all been shown to influence the verdicts even when juries are thoroughly processing information. Jurors use the rational system to process the case's relevant factors, whereas irrelevant factors of the case process in the experiential system. Although jurors should make an effort to use the rational system to analyze the facts and evidence of the case, when using the experiential system to make the decisions, they are more susceptible to biases. CEST dual processes' ability for co-occurrence between the rational and experience system provides uniqueness to studying jury decision-making with this model to help overcome literature inconsistencies. Through a better understanding of the influence of information

processing, strategies used to communicate with jurors can be refined utilizing CEST as a jury decision-making model.

CEST's dual-processing information systems explain how jurors can use effortful cognitive ability yet have irrelevant factors that still influence decisions, whereas ELM only accounts for irrelevant influences when jurors have low motivation or ability (Polavin, 2019). Polavin's study (2019) adds support to CEST as a jury decision-making model by predicting the type of information jurors will consider, the influence from that information, and if they will be able to change decisions with new information. For these reasons, I propose using CEST as the information processing theoretical framework for this research. Polavin (2019) suggested future researchers implement methodological changes to the type of information, adjust predictor variables in the narratives, and further increase the strength of the manipulation. These suggestions led me to use the bona fide group perspective as a methodological framework and attribution theory as an additional theoretical framework. To get further insight into Bona Fide Group Perspective, Cognitive-Experiential Self-Theory, and Attribution Theory, I will now introduce the significance of these theories in jury decision-making.

Bona Fide Group Perspective

Juries can be studied using the bona fide group perspective. Bona fide groups naturally form in the real world and are studied by using the groups' communication process, negotiated group boundaries, and a group's external and internal environmental and contextual factors (Putnam, 1994). The two criteria for bona fide groups, permeable boundaries and interdependence with the context, are met by juries. Jurors individually bring vast experiences from multigroup membership that influence their communication

process. The contextual factors members draw up from external groups create permeable boundaries (Putnam & Stohl, 1990; Sunwolf & Seidbold 1998). As jury members fulfill their civic duties through jury duty, they create a reciprocal interdependence with the context. Through formal and informal communication, jury members communicate with internal group members and external groups outside of the jury, linking their boundaries, environments, and other contextual factors (Sunwolf & Seibold, 1998). The bona fide group perspective helps us examine the influence of external factors, such as multigroup commitments, on juror communication. In this study, bona fide group perspective provides context about jurors as a small group.

Cognitive Experiential Self-Theory

Jury decision-making depends on several influences, aside from the facts and evidence of the case, such as irrelevant factors from group communication, including context, internal and external locus of control, cognitive bias, emotions, past experiences, and many more (Lieberman, 2002). The experiential system guides behavior by encoding previous outcomes, guiding decisions with emotions and intuition through associations when we have experienced a similar situation (Epstein, 2014; Sladek et al., 2010). Alternatively, the rational system's conscious assessment of events and stimuli within the environment guides behavior by making intentional decisions (Epstein, 2014; Sladek et al., 2010). When processing information, jurors can be inducted into transportation or identification during the narrative case presentation. Transportation occurs when jurors process information at high rational and high experiential processing; all mental systems focus on events occurring in the narrative, bringing audiences into the story (Green & Brook, 2000). Furthermore, jurors may also experience identification with the victim or

defendant. Communication research of narratives investigates not only transportation into a narrative story but also identification with the characters within the story (Green, 2002). Identification is a communication strategy for persuasion to influence attitude changes toward a character's actions (Graaf et al., 2012). CEST provides a model to explain the influence of both irrelevant and relevant factors presented to the jurors.

The present study uses CEST in conjunction with bona fide group perspective to help both researchers and attorneys understand jury members' outside group commitment(s) and their influence on decision-making. CEST paired with attribution theory may help us understand emotional influence on verdicts and predict which of the jurors are likely influenced and persuaded. By understanding how the two systems, rational and experiential, interact with attribution theory, we can use CEST as a model to understand jury decision-making and make predictions about possible biases when the experiential system is used.

Attribution Theory

Jurors use internal and external factors to make attributions. Attribution theory begins with a behavior, event, or condition that individuals use to make specific attributions about how that outcome was attained (Heider, 1958; Weiner 1974, 1986, 1995). Jurors make inferences about those involved in the case from their personal internal and external loci of control. Locus of control is a concept used to explain how outcomes are based on the individual's belief of their control over different experiences and situations that impact their lives (Rotter, 1966). Jurors' loci of control dictate their perception of the defendants or victims and impact how they attribute the behaviors (Finch & Munro, 2005). Individuals with an internal locus of control believe their

personal decisions and efforts guide their behavior. In contrast, individuals with an

external locus of control rely on chance and powerful others to guide their behaviors

(Ajzen, 2002).

Individuals will sometimes underestimate the situational (external) factors and

overestimate dispositional (internal) factors to fill causal gaps in the story to explain

human behavior. Jurors who overestimate dispositional factors make a fundamental

attribution error, creating biases in the decision-making process, possibly leading to

incorrect verdicts (Shtudiner et al., 2017). Jurors, considering the bona fide group

perspective, are influenced by their external group membership(s) and other external

factors, which may lead to a fundamental attribution error if they overestimate internal

factors to explain the defendant and plaintiff victim behavior. Therefore, the study is to

better understand the relationship between the impact of the communication used within a

trial and loci of control. For these reasons, this research uses attribution theory,

fundamental attribution error, and bona fide group perspective in conjunction with CEST

to better understand and possibly predict jury decision-making.

This research aims to provide an explanation of the jury decision-making process

by using the central themes of several theories and concepts to explain under what

circumstances verdict outcomes are affected. Slater and Gleason (2012) provide

strategies to further communication theory by utilizing centralized themes within theory.

In this study, utilizing an alternative operation for CEST and attribution theory by

analyzing their relationship together may aid in conceptualizing these theorized relations.

Additionally, this study seeks to extend the range of existing findings from Polavin's

(2019) study by adding independent variables relevant to attribution theory and identification through messaging.

The communication discipline has room to expand jury decision-making research by providing insight into communication strategies that impact jury information processing. Jury decision-making is vital for civilian power in a democracy and for attorney performance. Many jury decision-making models have been utilized for jury research, and CEST has a significant relationship with the jury decision-making process. Yet it is unclear the strength of irrelevant factors has on CEST and the jury decision-making process. Therefore, I propose analyzing high unrelated detail eyewitness testimony in civil trials. This research aims to determine how external factors influence jurors' verdict outcomes. Thus, this study is to better understand the communicative challenges and strengths in the courtroom.

In review, this chapter introduced the importance of understanding jury decision-making, two models used, and the addition of attribution theory as well as bona fide group perspective. This study aims to add to the body of knowledge about jury decision-making by considering the impact of juror's emotions and stress as they reach a verdict. It fills an existing gap by understanding the cognitive biases that influence information processing and open doors for further research into jury decision-making. Additionally, by understanding the juror's locus of control, attorneys can better predict how jury members will process different types of information. To investigate this, chapter two includes a literature review of a variety of theoretical approaches to jury decision-making. Chapter three includes the methodology to study the interaction of these theories. Chapter four introduces the results. Lastly, chapter five discusses the results further, as

well as the theoretical and practical implications, limitations, and areas for future

research.

CHAPTER 2

Review of Literature

Communication scholars have not fully investigated the role of communication within the courtroom, aside from jury deliberation. Thus, the purpose of this study is to better understand the role of communication and information processing during a civil trial. Furthermore, this study investigates the influential factors impacting jury decision-making. This study uses Bona Fide Group Perspective to better understand the impact of various external factors; this study also uses Cognitive-Experiential Self-Theory and Attribution Theory to analyze how information processing and locus of control affect verdict outcomes.

This review of literature examines Bona Fide Group Perspective, Cognitive-Experiential Self-Theory, and Attribution Theory. While a great deal of research has been conducted on these theories, little research has synthesized these theories to understand the impact they have on jury decision-making. The historical background and importance of the theories are discussed below, as well as jury decision-making implications extending from the use of these theoretical frameworks. Prior to the explanation of the proposed methodology in chapter three, this chapter will provide insight into the extensive background of literature that investigates the problem and informs my hypotheses and research questions.

Bona Fide Group Perspective

Before the 1980s and early 1990s, research by small group communication scholars focused on artificial problems in small groups made in a laboratory rather than naturally occurring small group situations (Putnam & Stohl, 1990). Putnam and Stohl

(1990) called for a change in the conceptualization of small group communication and began conducting early research of the bona fide group perspective by studying small groups of people in their most natural form. However, the bona fide group perspective is more than a call for studying groups in natural settings. The bona fide group perspective considers the communication process, negotiated group boundaries, and a group's external and internal environmental and contextual factors (Putnam, 1994). While studying small groups through this lens, Putnam and Stohl (1990) established two criteria that led them to the classification of the bona fide group perspective. The first criterion is stable but permeable boundaries. The bona fide group perspective boundaries are socially constructed boundaries that separate and link groups to a multitude of contexts. The second criterion is interdependence with the immediate context. Groups develop a reciprocal relationship with the environment that influences individual behavior (Putnam & Stohl, 1990). Bona fide group perspective focuses on the influences of a multitude of contextual factors that impact small group communication.

Stable yet permeable boundaries

The first characteristic that classifies a bona fide group is stable but permeable boundaries negotiated by the group members. These boundaries are fluid and dynamic, specifically linking the group members to their internal group dynamics and external influences (Putnam & Stohl, 1990). Group membership must have a clear identity within the cultural setting while also having the freedom to change while the boundaries stay intact.

Group members negotiate boundaries in four ways: (1) multiple group memberships and conflicting role identities, (2) representative roles, (3) changes in group

membership, and (4) group identity formation (Putnam & Stohl, 1996). Group boundaries are permeable when members of one group are also members of other groups. Multiple group memberships equip individuals with experiences that may cause role identity conflict because of race, gender, religion, and occupancy (Putnam & Stohl, 1996). Multiple group memberships impact members' behavior, interpretation of the task in a given group, and interactions with other group members. Within the second element of negotiable boundaries, group members' act as representatives by becoming the link between the multigroup memberships. The group members become representatives for the outside groups they have commitments with. The third factor of permeable boundaries is group fluctuation. New members joining a group force the existing group members to build a new set of connections. Finally, permeable boundaries influences come from group identity. Groups can adapt to changes creating permeability, but groups must keep coherence amongst group members for stability to maintain goals and task completion (Putnam & Stohl, 1996).

Interdependent with the context

The second characteristic of a bona fide group is the interdependence with the immediate context, which centralizes around how groups depend on the surrounding environment. As Putnam and Stohl (1990) stated in their original article, "Context, then, is not simply a set of variables that impinges on the groups; rather it is embedded in the interactions of members since each message references and negotiates the degree of interdependence among internal and external groups" (p. 259). The group's context, the amount of interdependence, and the group's environment are foundational components of the small group (Beck et al., 2016). According to Stohl and Putnam (1994), group context

is the "intergroup system or the environment within which the members situate themselves" (p. 286). Groups are interdependent on information and communication from within and in the surrounding environment, potentially influencing group interactions.

Group interdependence with the immediate context is rooted in communication. Putnam (1996) highlighted four key characteristics of connectivity and interdependence: (1) intergroup communication, (2) negotiation of jurisdiction and autonomy, (3) coordinated action among groups, and (4) interpretive frames. Groups are embedded in external factors such as organizational, political, social, and other environments that impact communication within the groups (Putnam & Stohl, 1996). Intergroup communication refers to the connectivity of group members and external factors that shape group norms and rules. External contextual factors also impact the negotiation of jurisdiction and, more specifically, the autonomy of a group (Putnam, 1996). Communication gives the group opportunities to negotiate contextual factors such as: who they are, what they stand for, and how they view the world (Beck et al., 1998). Coordinated actions between groups heavily rely on external authority, which impacts the task. Lastly, interpretive frames focus attention on group communication. Group members build narratives from evidence and connect decision outcomes to their interpretation of the task (Putnam, 1996). Contextual factors, internally and externally, influence group communication and decision outcomes. Sunwolf and Seidbold (1998) suggest jurors use formal and informal channels of communication to negotiate, suggesting interdependence with a variety of contexts.

Bona Fide Group Perspective and Juries

Putnam and Stohl (1990) called for the revitalization of small group theory and bona fide group perspective to bring small group research to the real world. The two characteristics define bona fide groups by stable but permeable boundaries and the interdependence of context (Putnam & Stohl 1990, 1996). The bona fide group perspective has been used as a methodological justification for studying the complexity of groups and their context, while other researchers have used the perspective to explain how natural groups form related to their context (Beck et al., 2016) The two key characteristics of the bona fide group perspective apply to the study of juries and the internal and external contextual factors of a small group. Drawing from diverse corners of the nation in conjunction with internal jury identity impact the dynamic of the small group. The makeup of juries is unpredictable due to the vast differences of internal identity each member brings to the group; however bona fide group perspective offers an explanation of the impact of internal contextual factors, such as identity.

Juries can be classified as bona fide groups (Sunwolf & Seibold, 1998). The personal, professional, and systemic experiences individuals contribute to juries offer vast complexities. Sunwolf and Seidbold (1998) discussed jurors as "significant social entities drawn from diverse sections of society, each with rules and practices for group decision-making they must jointly enact" (p. 286). Juror's multigroup membership brings a diverse perspective but can impact role identity and conflict. Jury members are also representatives between the jury and a number of external groups (Sunwolf & Seibold, 1998). As bona fide group members, the jurors can provide contextual information from the external groups. This idea inevitably creates a permeable boundary, fulfilling the first characteristic of a bona fide group. The bona fide group perspective offers

methodological justification by studying the complexity of the group member's individual identity as well as the external factors that influence group member communication, such as considering their commitments to other groups.

Citizens are called to jury service to fulfill their civic engagement duties (Cooper et al., 2006), creating reciprocal interdependence between the group and the environmental context. Juries rely on both formal and informal communication with internal group members and external groups outside of the jury, linking their boundaries, environments, and other contextual factors (Sunwolf & Seibold, 1998). Observing jury decision-making through a bona fide perspective gives us the opportunity to study the external contextual factors that influence jury members' communication. This research requires us to look at each juror individually; however, bona fide group perspective offers context to jurors that could impact the verdict outcome. Before researchers can make proper inferences about group decisions, understanding individual information processing is pertinent. Cognitive-experiential self-theory offers insight into juror's decision-making process.

Cognitive-Experiential Self-Theory

Cognitive-Experiential Self-Theory (CEST) categorizes information into two systems through which we make sense of the world, creating a dual-process model (Epstein, 1994). Individuals automatically make an unconscious personal theory of reality self-theory, world-theory, and connecting judgments (Epstein et al., 1992). This dual-process model is comprised of rational and experiential systems. The rational system processes evidence and logic. In contrast, the second system of CEST is the experiential system. This system is an emotional, content-specific, preconscious process (Epstein,

1994). Epstein's (1994) combination of both systems, rational and experiential, created a unified framework for understanding information processing in decision-making. Although these two processes are dramatically different, under most circumstances, they work best together (Pacini & Epstein, 1999). Individuals use both systems simultaneously to interpret behaviors and make all of one's decisions.

Rational processing requires large amounts of cognitive resources, making the process slow and analytical operating at the conscious level. The process is intentional, affect-free, and reason-orientated (Epstein 1994; Epstein et al., 1996). Rational processing requires logic and evidence to justify decision-making (Epstein, 1994). In contrast, the experiential system is intuitive and adaptive to allow individuals to learn from experiences (Epstein, 1994).

The experiential system encompasses people's personal theories of reality and operates according to principles that are automatic, holistic, and affective (Epstein et al., 1996). The experiential system is a less effortful processing system serving as the default mode and it is used most of the time (Lieberman, 2002). The experiential system guides behavior by encoding previous outcomes. Outcomes guide decisions with emotions and intuition through associations that manifest in an emotional gut feeling when we have experienced a similar situation (Epstein, 2014; Sladek et al., 2010). Alternatively, the rational system's conscious assessment uses slow, effortful appraisal of events and stimuli within the environment to guide behavior by making intentional decisions (Epstein, 2014; Sladek et al., 2010). Both systems provide an explanation for information processing and decision-making.

Experiential and Rational System Interaction

Decision-making, according to CEST, guided by the rational and experiential systems, is influenced by the situation and emotional implications (Denes-raj & Epstein, 1994). If the situational factors remain constant, and the emotional implications increase, there will be a shift from the rational to the experiential system (Denes-raj & Epstein, 1994). Denes-raj and Epstein (1994) conducted a study to understand the interaction between the rational and experiential system. The participants in the study were directed to choose between two bowls of jellybeans. One bowl had ten white beans and one red, whereas the other bowl had 100 white and between five and nine red beans. The participants were presented with the probability of picking the red bean out of both bowls. The bowl with only ten white beans had a higher probability of drawing the one red bean, whereas the bowl with 100 white beans and between five and nine red beans had a lower probability. Two groups of win and lose trials were made. The win trial could win one dollar but not lose, whereas the lose trial could lose their one dollar but not win. Positive effects increase the use of the experiential system, resulting in subjects relying on intuition; thus, the researchers hypothesized that there would be fewer positive effects on the lose trials making them more likely to use rational processing. In contrast, the win trials would be following their intuition and use the experiential system, and thus would choose more nonoptimal choices.

Denes-raj and Epstein (1994) reported a majority of subjects in both win and lose trials made nonoptimal choices in relation to the probability of winning by picking the larger bowl that had a smaller probability of picking a red bean. The subjects reported that they chose the larger bowl with more red beans because it looked like there were more ways to win, even in light of knowing the probability favored the smaller bowl

(Denes-raj & Epstein, 1994). This study is an example of the two systems conflicting and the experimental system overriding the rational system. The subjects relied on their intuition from the experiential system and their emotions, resulting in making nonoptimal choices. In a similar study, Epstein and Pacini (2001) asked the subjects if they would pick the higher or lower probability gamble and what a "rational person" would pick. The answers supported the study when the participants said the rational person would pick the best answer while they picked the nonoptimal answer. Both of these studies show the interaction between the experiential system and the rational system, specifically the experiential system overriding the rational process.

The two systems interact with one another; however, they can both be active at high levels (Epstein, 1994). It is expected to only be able to experience high rational or high experiential processing one at a time, but in fact, they can both be active at high levels at the same time. Polavin (2019) discussed this important component of CEST that is particularly applicable to jury decision-making. His study found that the high activity of both systems adds another aspect to study CEST outside of the experiential only and rational only conditions. Epstein (1994) found that the high activity of both processes can still lead to bias decision-making unless individuals possess the ability to override their intuition. In the real world, individuals do not process information solely from the rational-only and experiential-only conditions. Exposure to conflicting manipulations influences both systems and inevitably leads to high rational and high experiential processes co-occurring. CEST attributes heuristics (biases) to the normal mode of operation, high experiential processing. Experiential processing is contrasted by high

rational processing as an alternative organized conceptual system influencing one another's operation. (Epstein, 2003).

The experiential system is automatic and intuitive, which can cause cognitive biases within the dual processing model. Heuristics are mental shortcuts that reduce the complexity of a task, often resulting in cognitive biases. Individuals intuitively, sometimes rationally, use heuristics to make judgments and quick decisions, which can result in cognitive biases being made during the mental shortcuts (Epstein et al., 2002; Kahneman & Tversky, 1973). Although both systems are prone to bias, the experiential system independently is claimed as biased because irrelevant factors such as physical attractiveness (Efran, 1974), socio-economic status (Mazzella & Feingold, 1994), gender, emotional cues, prior experiences (Lieberman, 2002), and pretrial publicity (Lieberman & Arndt, 2000), affect this system (Epstein, 2014). The experiential system is led by intuition but can still be overridden by rational processing. An individual's ability to override their intuition and rationally processes information leads to less cognitive bias.

The ability to override an intuition and reach the correct conclusion with rational thought can be measured by the Cognitive Reflection Test (CRT). Fredrick (2005) asked subjects a question that most answer quick and intuitively, but only those who override their intuition reach the correct answer (e.g., a bat and ball cost $1.10 in total. The bat costs one dollar more than the ball. How much does the ball cost?). The answer to the CRT question is five cents. Many will reply with an answer of ten cents, which is incorrect. If the bat costs $1.00 more than the ball and the total is $1.10, then the ball must cost five cents and the bat must cost $1.05. If the ball were to cost ten cents, then both together would cost $1.20. Subjects that answer these questions correctly have the

ability to use the rational system to override the initial intuition from the experiential system, thus connecting CRT to CEST (Toplak et al., 2011). CRT, in this study, will measure jurors' ability to override their intuition.

Cognitive Experiential Self-Theory and Jury Decision-Making

Narratives

As a persuasion tactic, attorneys can present a case in a narrative by thematically linking events of a case together chronologically (Rideout, 2008). When an attorney uses narrative case presentations, the juror uses that story to understand what happened. Individuals transport into narratives, removing their own cognitions and focusing on the story (Green et al., 2004). This idea proves to be a highly persuasive tactic, due to high experiential system use and the rational system use, resulting in a co-occurrence of the dual processing systems.

Transportation. Narratives are used by attorneys to persuade jurors, as they (the jurors) transport themselves into the narrative. The story model, which investigates jury decision-making exclusively, provides evidence about narrative persuasiveness (Pennington & Hastie, 1992). Jurors will use past experiences to explain behaviors and fill in the gaps in the narrative presentation (Pennington & Hastie, 1992). The use of past experiences to close causal gaps in the story model also relates to CEST. The story model, however, does not provide a way to make predictions about how and whether individuals will be persuaded by the narrative and able to transport into narratives (Polavin, 2019). Transportation occurs when all mental systems focus on events occurring in the narrative, bringing audiences into the story (Green & Brook, 2000). This definition aligns with CEST, as all mental systems are simultaneously focused on the

narrative. In contrast, for example, the Elaboration Likelihood Model (ELM) cannot explain transportation in jury decision-making. Transportation cannot be placed on the elaboration spectrum, as it evokes a "vicarious cognitive and emotional response" (Moyer-Gusé, 2008, p. 409). Transportation requires a co-occurrence between rational and experiential system sat once. ELM does not account for both processes functioning together in high function, which is a limitation when explaining jury decision-making or making predictions about verdicts.

  Identification. Communication research of narratives investigates not only transportation into a narrative story, but also identification with the characters within the story (Green, 2002). Identification with characters is one component through which narratives can change attitudes (Slater & Rouner, 2002). As a reader, individuals adopt the character's goals and plans, thus experiencing emotions for their experiences depending on the outcome (Oatley, 1994, 1999). This aligns with CEST, as individuals utilize both processing systems to identify with the character within the story to relate and rationalize the experiences and characters' actions. Identification can reinforce or reduce existing attitudes in a persuasive narrative (Graaf et al., 2012) In this study, identification in the narrative is used as a mechanism of narrative persuasion.

  When jurors rely on narratives, identification, and transportation to understand the evidence of a case, they are likely to use the experiential system to guide the rational system. The experimental system encodes information with narratives and images (Epstein, 1994). Two irrelevant factors, narrative presentation and past experiences, which relate to the experiential system, influence the verdict with a possible bias. The experiential system creates heuristics in the decision-making process when jurors take

mental shortcuts to fill the gaps in the story, make sense of ambiguities, and settle contradictions. CEST can be used as a model for understanding the influential factors resulting from narratives, such as high emotion, stress, heuristics help researchers understand the narrative impact. CEST helps in making predictions about the jury decision-making process likely persuaded by narratives.

There are several models of information processing, but a major critique of other models is the inability to consider all aspects of information or study individuals with full cognitive ability and effort to process information (similar to critiques of ELM above) thoroughly. Polavin (2019) made several important contributions to using CEST as a jury decision-making model. First, the co-occurrence of high rational/experiential systems brings uniqueness to CEST. From that contribution, he found that subjects who engaged in high experiential and high rational thought are more persuaded by narrative. He also found that the co-occurrence of the dual-process systems operating is what makes CEST specifically unique when studying jury decision-making. Understanding CEST and jury decision-making are important, but it does not fully eliminate biases in decision-making. This study will provide further investigation of CEST as a jury decision-making model by considering additional theoretical frameworks

Attribution Theory

Attribution theory provides a framework to understand how individuals make inferences about the actions of others and oneself. People use their feelings and beliefs to explain the cause of an outcome. The purpose of making attributions stems from one's desire for stability and to achieve control over one's behavior and events (Heider, 1958). Individuals make attributions from two factors: (1) dispositional or internal factors and

(2) situational or external factors (Heider, 1958; Jones & Davis, 1965; Kelley, 1967; Weiner, 1974, 1986, 1995). A dispositional factor is grounded in the behavior and personality of a person. For example, we may ask ourselves, did this person do this action because that is who they are? Another way to make attributions is based on situational factors, including the environment an individual is in that potentially influenced the action (Heider, 1958). For example, did this person do this action because of the influence of the environment they are in?

Social perceivers use dispositional attributions to associate a cause of behavior with the internal characteristics of a person (Harvey et al., 1981). Instead of attributing the behavior of someone to environmental factors, observers assign causality to personality or motives. Harvey et al. (1981) emphasized the importance of situational attributions as they are made when an individual's behavior is a byproduct of the external factors such as the environment. Different factors impact disposition and situational attributions, but they both begin with an outcome. Attribution theory begins with a behavior, event, or condition that the individuals use to make specific attributions about how that a given outcome was attained. Heider (1958) used formulas to explain the outcomes for the attribution, which began the foundational research for attribution theory.

Naïve Analysis of Action

The naïve analysis of action sets the groundwork for attribution theory (Heider, 1958). The naïve analysis of action set forth principles exemplified by individuals when determining the causation of an action (Heider, 1958). The thematic principles Heider set forth are (1) observation of the action or behavior; (2) assessment of intent; and (3) attribution about the source of motivation (Weiner, 1986). After observing the outcome,

individuals assess the intent dependent on a combination of task difficulty and effective environmental force (Heider, 1958).

Heider's (1985) study of personal and environmental forces continued to develop through the concept of Can X Try. Attribution theory begins with an outcome; "can" and "try" are conditions of the outcome. Can is the environmental force, whereas try is the personal force. He found three behaviors that influence our action-outcome attribution: ability, task difficulty, and effort (Weiner, 1986). Ability and effort (try) are dispositional factors, whereas task difficulty (can) is a situational factor. Heider (1958) set up the framework for internal and external factors influencing action outcome attributions, but internal and external factors can also be studied on an individualistic level. As attribution theory continued to expand, Rotter (1966) contributed to the impact of locus of control.

Locus of Control

Rotter (1966) studied the locus of control, which is a concept used to explain how individuals view rewards, punishments, and other outcomes based on the individual's belief of their control over different experiences and situations that impact their lives. Rotter (1966) sought to find a measure of individual differences in generalized expectancies for internal versus external control of reinforcement. Individuals with a strong internal locus of control believe their personal decisions and efforts guide their behavior. Individuals with an external locus of control rely on fate and luck to guide their behaviors (Ajzen, 2002).

The locus of control has been extensively studied in classroom reinforcement, rewards, and punishment for success and failure in academic outcomes. When a student perceives reinforcement following some action, but they do not believe they're able to

achieve that action, the student typically perceives it as luck (Rotter, 1966; Weiner, 1986). Students with an external locus of control will believe the external factor of luck determined the outcome rather than the student's behavior controlling action outcome. The student would perceive this event as unpredictable because the environment surrounding this belief would be due to external control. Internal control is when the student perceives that the reward or punishment is due to their own behavior or other invariant characteristics (Rotter, 1966).

Individuals with a stronger internal locus of control have higher expectancies for success because they attribute their ability to their own control. Individuals with an external locus of control have a lower expectancy of success because they rely on external factors such as luck. Weiner (1986) explained expectancies using a tennis match comparison: a tennis player winning a match leads to high expectancies of success because of the player's abilities (internal). A tennis player winning the coin toss at the beginning of the game leads to lower expectancies of success because the win was based on the player's luck (external) (Weiner, 1986). Weiner's example is consistent with other research. Holden et al. (2019) found college student athletes with an external locus of control feel little control over their circumstances. The external locus of control causes student athletes to have lower expectancies of success, causing them higher amounts of perceived stress (Holden et al., 2019). Karkoulain et al. (2016) also studied perceived stress and locus of control but focused on the impact on work-life balance. They found work-life balance expectancies shift when employees with an internal locus of control report higher perceived stress (Karkoulian et al., 2016). Expectancies shifted as the external factor of perceived stress changed. This study exemplifies the relationship

between a sense of personal control and stress and the expectancies individuals have for a specific outcome. The individual's, expectancies may shift based on internal and external factors, like perceived stress, resulting in a possible change of future behavior or events. Both loci of control and attribution theory focus on behaviors directly related to internal and external factors. There are several similarities between Heider (1958) and Rotter (1966), although the two studies did not cite one another. Weiner (1971, 1974) recognized each body of literature had some missing pieces, combining the two and refining the work, beginning the attribution theory of motivation.

Achievement Expectancy

Weiner (1971) combined the work of Heider (1958) and Rotter (1966) to build four perceived causes of achievement: two internal (ability and effort) and two externals (task difficulty and luck). These proposed causes mirror Rotter's locus of control and may provide insight into attributions for achievement. Weiner (1974, 1986) further studied Heider's (1958) research in collaboration with Rotter's (1966) and expectancy value theory by investigating attribution theory of motivation in a three-dimensional model: (1) stability, (2) locus of control, and (3) controllability. In earlier research, Weiner used an intrapersonal approach to create the attribution theory; but as the theory developed, he incorporated emotions and refined controllability to effectively use attribution theory through an interpersonal lens. The theoretical structure for both intrapersonal and interpersonal are identical; the contrast between the two is the causal inferences made. Intrapersonal causal inferences are of oneself and interpersonal inferences are causal inferences about others.

Attribution Theory of Responsibility

In the interpersonal theory of attribution, the dimension of controllability is the most important among the three dimensions. Weiner (1995) refined controllability by using the distinction between control and responsibility from a criminal justice perspective to refine how controllability is used in attribution theory. For example, if someone mentally unstable commits a crime, the act is controllable. However, because of their mental state, that individual does not bear responsibility (Weiner, 1995). Weiner (1995) explains the attribution-responsibility-action model in a formula: thinking (perception of responsibility), emotions (anger and sympathy), and actions (interpersonal evaluation). The theoretical framework offers a broad but unifying perspective to help individuals explain motivational behavior. Weiner's (1995) attribution-responsibility-action model predicts that people are more likely to punish an actor who caused a problem when people make higher internal attributions by blaming the actor and lower external attributions by blaming the situation. Internal attributions suggest the actor is responsible, whereas external attributions suggest the actor to be less responsible (Jeong, 2009). For example, if person B perceives person A's problem to be caused by an internal factor under A's control, person B also perceives person A to be more responsible for their problem, resulting in a high level of blame.

Attribution theory is an extremely broad framework that has been studied extensively with a variety of behaviors, events, and conditions. For example, support has been found for attribution theory in academic achievement (Batool & Akhter, 2012), poverty (Ige & Nekhwevha, 2014), aggressive driving (Wickens et al., 2011), job loss (Prussia et al., 1993), chronic fatigue (White et al., 2006), and HIV/AIDS (Cobb & de Chabert, 2002; Dooley, 1995; Steins & Weiner, 1999; Weiner et al., 1988). Attribution

theory has also been used in conjunction with communication behaviors, examining different types of communications that affect the attribution of responsibility and controllability (Chaudhry & Loewenstien, 2019), interpersonal communication and relationships within an organization (Barry & Crant, 2000), patient-provider health communication (Burgess et al., 2019), online and offline communication inconsistencies (DeAndrea & Walther, 2011), media effects (Knobloch-Westerwick & Taylor, 2008), crisis communication (Jeong, 2009; Hwang & Jeong 2012), and victim communication about crime and trauma (Kosenko & Laboy, 2014). These studies and other extensive research about attribution theory focus on the impact of attribution in a variety of contexts.

Attribution Theory and Jury Decision-Making

Finch and Munro's (2005) study examined the attribution of responsibility and blame in rape trials involving intoxication. The study used small focus groups and a real time trial simulation. The case consistently presented two people who knew each other but were not intimate, met at a party, and engaged in intercourse. The intoxicant, level of intoxication, and administration of the drug varied between each scenario. The study's findings indicated that jurors frequently have personal beliefs and attitudes that influence attributions of blame and responsibility. Participants relied on legally irrelevant factors and requested the woman's sexual history (Finch & Munro, 2005). Participants made causal attributions from external behavioral factors when they questioned the woman's sexual morality. Following Weiner's (1995) formula, if the juror (person B) perceives the rape to be the woman's (person A) fault due to sexual history, the juror (person B) would perceive the rape to be the woman's (person A) responsibility, thus resulting in a high

level of blame. Jurors making inferences about a victim's behavior causing the responsibility of the crime exemplify that they have an internal locus of control, whereas jurors that make inferences about the environment and situation possess an external locus of control (Rotter, 1966; Grubb & Turner, 2012) which would result in low levels of blame. This study links the importance of attribution theory and jury decision-making, but there is research to conduct to better understand the impact of attributions in jury decision-making.

Attribution theory can help people make inferences about others' behavior that may not always be correct. According to Heider (1958), "the search for relatively enduring aspects of our world, the dispositional qualities in nature, may carry us quite far from the immediate facts, or they may end only a step from them" (p. 80). Individuals underestimate the situational factors and overestimate dispositional factors to fulfill their desire to explain human behavior (Harman, 1999). The term fundamental attribution error was officially created by Ross (1977) and has supported research in several scenarios. Attributions about the cause of a defendant's behavior are typically dispositional, where jurors assume that the defendant's action was the result of their dispositional factors and not the defendant's situational circumstances (Kassin & Sukel, 1997).

Fundamental Attribution Error

Fundamental attribution error (FAE) is a cognitive bias and can be viewed as a heuristic. Deriving from the experiential system, FAE can lessen the effort and make hasty attributions to other's behaviors with dispositional factors rather than various situational factors (Shtudiner et al. 2017). Individuals' spontaneously process information in the experiential processing system may contribute to making FAE. When

individual makes an attempt to understand others' behaviors and intentions (Moran et al., 2014). Researchers in this area have suggested that stressful conditions that interfere with the rational system and exacerbate heuristic biases cause decision-makers to shift toward the experiential system (Evans, 2003; Kahneman & Frederick, 2002; Reyna, 2004).

By understanding the impact of effort, spontaneity, and emotion on cognitive biases and FAE, jurors who rely on the experiential system will likely make mental shortcuts to reduce the complexity of the decision and make a fundamental attribution error about behaviors of individuals involved in the case if they do not have the ability to override the system interaction. The CEST model, experiential system explains how jurors use previous experiences to cause emotional responses during decision-making (Lieberman, 2002). This model in turn can inform how internal and external factors influence decision-making, cognitive biases (heuristics), and emotion and provides a theoretical framework for this study.

CEST provides a framework to study jury decision-making as the experiential and rational systems interact. The rational system requires logic and evidence to justify decision-making (Epstein, 1994). Trials have a variety of pieces of evidence to use to rationalize and justify decision-making like the presentations of evidence, expert testimonies, eyewitnesses, and probability statistics. Jurors commonly use this system as they typically take their service seriously and thoroughly think through evidence that was presented in a trial (Vidmar & Seidman-Diamond, 2000). The slow and analytical process of jury decision-making requires members to use the rational system of CEST. However, the experiential system also has a major impact on jury decision-making. As previously

stated, jurors bring a variety of multigroup commitments, experiences, and emotions to the court room which influence the verdict.

As the theoretical foundation, CEST information processing and decision-making will drive this research. Attribution theory offers a unique perspective to understanding juror biases and liability attributions. The bona fide group perspective offers a unique insight to studying jurors outside of a group deliberation by understanding the impact of multigroup membership. This theoretical framework will help researchers understand decision-making processing and biases. It will also help the legal field gain a stronger ability to predict jury decision-making through a refined way of understanding information processing.

Communication research is needed to understand the links between jury decision-making, information processing, and communication presentation. Ultimately, what is at stake is the accuracy of the jury decision-making in high emotional civil cases. A better understanding of case presentation and eyewitness testimony details on jury decision-making will help researchers and legal professionals present jurors with the best information of a case. Therefore, the following hypotheses and research questions guide this study:

H1: Jurors who receive the high unrelated detail eyewitness testimony will favor the defendant more than jurors who receive low unrelated detail eyewitness testimony.

H2: Jurors with an external locus of control will attribute liability to the defendant more than jurors with an internal locus of control.

RQ1: How do jurors with external group membership attribute liability?

RQ2: How do jurors who override the experiential system attribute liability/award money?

CHAPTER 3

Methodology

The purpose of this study is to understand jury decision-making and build a unified framework to predict future jury decisions by analyzing mock jurors' loci of control, narrative case presentation, and verdicts. This chapter explains the overall research design for this study, including a description of the research setting, sample, instrumentation, and procedures. The four purposes of this chapter are to (1) describe the design of this study; (2) explain the population sample selection; (3) describe the procedures of data collection; and (4) provide an explanation of the quantitative analysis and ethical considerations. The following hypotheses and research questions will be investigated:

H1: Jurors who receive the high unrelated detail eyewitness testimony will favor the defendant more than jurors who receive low unrelated detail eyewitness testimony.

H2: Jurors with an external locus of control will attribute liability to the defendant more than jurors with an internal locus of control.

RQ1: How do jurors with external group membership attribute liability?

RQ2: How do jurors who override the experiential system attribute liability?

Study Design

The experimental study design is modeled after Lieberman (2002) and Polavin (2019) information processing conditions of high experiential and high rational processing (Appendix A). Additionally, rather than using physical attractiveness biases (Lieberman 2002) or narrative and non-narrative case presentation (Polavin, 2019) as the irrelevant factor, this study takes a narrower approach to case presentation. The irrelevant

factor is modeled after the Bell and Loftus (1989) presentation type of high or low eyewitness testimony detail. This study combined the two experimental designs by utilizing a 2 (presentation type: high or low irrelevant detail testimony) x 1 (processing: high experiential/high rational) between-subjects factorial design. Dependent measures include locus of control, the liability of the defendant, verdict, and damages awarded to the plaintiff. Subjects were randomly be assigned one of the two conditions.

Subjects were told that they were going to read about a civil lawsuit and be asked to determine defendant liability and damages. First subjects provided demographic information (e.g age, biological sex, race/ethnicity, education, household income, and political affiliation) and answered the locus of control questionnaire (Appendix B). Subjects will be given case instructions (Appendix C), jury instructions (Appendix D), case presentation (Appendix E), and then one witness statement (Appendix F). The case instructions, jury instructions, and case presentation will induct subjects into a high rational and high experiential processing mode by including emotional language and analytical encouragement (Polavin, 2019). The subjects were given additional evidence in the form of an eyewitness testimony presentation which includes a single sentence high or low irrelevant detail, and then asked to complete a final verdict form assigning guilt, liability, and monetary award. Finally, participants completed the rational experiential inventory (Appendix G) and the cognitive reflection test.

Sample

This study aimed to better understand jury decision-making in conjunction with communication, information processing and locus of control. Before beginning the study, I achieved approval for the study from the University's Institutional Review Board.

Following approval, I used QuestionPro survey software to complete the online study. A

convenience sample was used to obtain a sample of participants over the age of 18, the

minimum age to serve on a jury. Participants for a convenience sample were recruited

from South Dakota State University mass communications introductory course, other

students and faculty, personal social networks, as well as via email recruitment. A total of

$N = 231$ people began the study. Subjects who spent less than five minutes on the study

were excluded from the study because they were likely not paying attention to the detail

in the study. Subjects who did not complete the study were excluded from the analysis of

the study. A final sample of $N = 121$ was attained, ensuring at least 50 subjects per

condition, described below.

On average, subjects were 29.7 years old ($SD = 22.8$), and women made up over

half of the sample (69.8%). Regarding race, the sample was predominantly White at

93.6%, with 1.7% Asian, 1.2% Hispanic or Latino (Mexican, Mexican American,

Chicano), 1.7% Multiracial, .58% Black or African American, .58% other, and .58%

preferring not to say. Over half of the respondents indicated they lived in South Dakota

(59.7%). The majority of the sample (36.5%) had completed some college or obtained a

Bachelor's degree (31.4%). Other educational attainment included a Doctorate (2.3%), a

Master's degree (8.4%), an Associate's degree (8.1%), 1.7% completed trade, technical,

or vocational (1.7%), and high school diploma (11.6%). Regarding political affiliation,

44.2% identify as Republican (strong = 23.5%, weak = 38.7%), 26.2% Democrat (strong

= 21.9%, weak = 15.9%), 23.8% independent, and 5.8% identified as other. Household

income was measured in $20,000 increments, with 20.38% of the participants making

under $20,000, 15.3% making 20.001 to 40,000, 15.9% indicated to earning 40,001 to

60,000, 12.1% bring in 60,001 to 80,000, 12.1% earning 80,001 to 100,000, and 24.2% obtaining 100,001 or more per year.

Procedure

Case and Presentation. Subjects read a civil lawsuit about a fatal pedestrian-automobile accident where the pedestrian was crossing the street. He was hit and killed by the defendant who was driving a car. The case details are similar to Lieberman (2002) and consist of a combination of Polavin's (2019) rational and experiential induction presentation. The defendant who hit the pedestrian claims he shouldn't be held liable because the circumstances prevented him from being able to stop in time. The victim was jaywalking, not on a crosswalk, at the time of the accident. The plaintiff, the victim's wife, claims the defendant was distracted, preventing him from having enough time to stop. The victim's wife brought the civil lawsuit to court against the driver, requesting $7,000 for funeral expenses and $200,000 for pain and suffering damages. The case is intentionally ambiguous to measure the influence of the variable manipulation (Polavin, 2019).

The case presentation is a mixture of narrative and non-narrative presentation. The overview, accident information, victim information, accusation of negligence, and defendant's case were presented as statements of fact in paragraph form with pieces of vivid and emotional language.

Information Processing. Subjects were presented the jury and case instructions, as well as one case presentation. The case presentation included emotional language (Li, Coduto, & Moore, 2019), such as "graphic," "vivid," "upsetting," "feelings," "put yourself in their shoes", and "pain and suffering" to induct subjects into high experiential

processing. Using the phrase "put yourself in their shoes." will further induct participants into identification (Graaf et al., 2012). In contrast, participants were inducted into high rational processing by including language that is mathematical and accuracy oriented, such as "numerical," "addition and multiplication," "calculations," "accurate," and "determine a percentage of liability." The inclusion of experiential and rational process induction language is modeled after Polavin's (2019) study, as are the jury and case instructions.

Eyewitness testimony manipulation. Polavin's (2019) additional evidence prior to the final verdict contained information from cellphone records about the defendant possibly texting during or near the time of the accident. This study used a similar concept of additional evidence; however, this study uses eyewitness testimony as additional evidence. Bell and Loftus (1989) studied the impact of the degree of detail (related and unrelated) of eyewitness testimony on the jurors' judgment of guilt. This study will utilize unrelated details as the irrelevant factor in the single eyewitness, the wife, of the fatal pedestrian-automobile accident.

The subjects will be randomly assigned one of two eyewitness testimonies: high unrelated detail ($n = 66$) and low unrelated detail ($n = 65$) that were adapted from Polavin (2019) to fit this study. The two eyewitness testimonies included the same information, with the exception of one sentence of high/low unrelated detail. The singular sentence of unrelated detail is important to CEST because the high unrelated detail testimony possibly produces an emotional reaction to be processed by the experiential system. The singular sentence of unrelated detail is important to identification as the change in

character of the victim possibly influencing the identification of the jurors with the victim.

Manipulation Checks. Following the case and jury instructions, subjects read the case and answered the following question to measure manipulation of emotional impact and analytical consideration. For the experiential processing measure following the case presentation, subjects were told, "Using the slider below, rank the emotional impact the case had on you" with a slide scale (1 = little or no emotional impact; 100 = strong or significant emotional impact). Following the eyewitness testimony, participants were told, "Using the slider below, rank the emotional impact the eyewitness testimony statement had on you" with a slider scale (1 = little or no emotional impact; 100 = strong or significant emotional impact). Additionally, to measure rational processing, participants were told, "Using the slider below, rank how much of your decision was based on an analytical consideration of the evidence with a slider scale (1=little or no consideration, 100=strong or significant consideration)". Independent samples *t*-tests were used to analyze the three manipulation checks.

Measures

Locus of control. Subjects completed the Internality, Powerful Others, Chance scale (Levenson, 1981). The multidimensional scale investigates internality, powerful others, and chance on a 24 item 5-point Likert-scale (1=strongly disagree; 5 = strongly agree). This was adapted from Rotter's (1966) general forced paradigm to ask participants about their personal experiences rather than the perspective about the general population. Levenson (1981) added the external subscales to encompass adults lived experiences (powerful others) and general perspective (chance). The three scales were

averaged to create a measure of powerful others ($M = 2.70$, $SD = .56$), chance ($M = 2.57$, $SD = .54$), and internality ($M = 3.61$, $SD = .45$). The powerful other was reliable (Cronbach's $\alpha = .75$) as was chance (Cronbach's $\alpha = .75$); however, internality did not reach reliability (Cronbach's $\alpha = .54$). Some scale items were dropped in an attempt to make the internality scale more reliable.

Guilt. Following the jury and case instructions, case presentation, and eyewitness testimony, the participants were asked to decide if the victim was guilty (1) or not guilty (0). A majority of the subjects ruled that the defendant was not guilty (78.5%), although some participants ruled not guilty (21.5%).

Liability. The second dependent variable asked subjects what percentage of liability they attributed to the defendant. This measurement ranged from 1% to 100%, and participants used a slider to select the value. Subjects, on average, indicated that the victim was mostly to blame by attributing less liability to the defendant ($M = 32.81$, $SD = 23.83$).

Awards. All subjects were asked how much award money should be given to the plaintiff; only $N = 22$ participants responded (the rest did not believe any money should be awarded). They were asked, "What amount of monetary damages would you award the plaintiff (victim's wife)? ($0-$207,000, if $0 put zero)". Participants were asked to enter the number amount in the comment box. The monetary award from the participants who award the victim damages were averaged ($M = 16,975.00$, $SD = 29,492.00$).

Rational Experiential Inventory (REI). The REI is the 40-item individual difference measure that assesses the traits for the general levels of CEST rational and experiential information processing (Pacini & Epstein, 1999; Appendix G). The two 20-

item dimensions (rational and experiential) were averaged to create a measure or the experiential and rational processing. This 7-point Likert scale (1 = strongly agree; 7 = strongly disagree) has two dimensions with 20-items per dimension made of two subscales (5) ability and (5) engagement for the experiential processing and the rational processing that this study will use as control variables. *Experiential ability* (e.g., "I believe in trusting my hunches") measures one's ability to use the experiential system to process information whereas, *experiential engagement* (e.g., "I like to rely on my intuitive impressions") measures the amount that an individual engages the experiential system. *Rational ability* (e.g., "I have a logical mind") measures the ability to engage in rational information processing whereas, *rational engagement* (e.g., "I enjoy intellectual challenges") measures the amount an individual engages the rational system (Pacini & Epstein, 1999). The 20 rational items were averaged to create a measure of rational processing ($M = 3.73$, $SD = .46$). Likewise, the 20 experiential items were averaged to create a measure of experiential processing ($M = 3.37$, $SD = .45$). In this study, these two dimensions of the REI were used as control variables. The rational dimension was reliable (Cronbach's $\alpha = .84$) as was the experiential dimension (Cronbach's $\alpha = .86$).

Cognitive Reflection Test (CRT). The cognitive reflection test measured subject's ability to override experiential system intuition with the rational system to reach the correct conclusion. Subjects that answer the test questions *correctly* have the ability to use the rational system to override the initial intuition from the experiential system, thus connecting CRT to CEST (Toplak et al., 2011). Fredrick (2005) asked subjects questions that almost everyone answers quickly and intuitively, but only those who override their intuition reach the correct answer (e.g., a bat and ball cost $1.10 in total. The bat costs

one dollar more than the ball. How much does the ball cost? The correct answer is .05.).

Answers to this question were coded as correct (1) or incorrect (0). Most participants

were incorrect: 77 (63.8%) of the participants answered incorrectly and 44 (36.4%) of the

participants answered the question correctly.

Analysis

Hypothesis one predicts jurors who receive the high unrelated detail eyewitness

testimony will favor the defendant more than jurors who receive low unrelated

eyewitness testimony. A chi-square test was conducted to determine if the high unrelated

detail eyewitness testimony influenced the jurors' guilty verdict of the defendant. An

independent samples *t*-test was conducted to test hypothesis two, which predicts jurors

with an external locus of control will attribute liability to the defendant more than jurors

with an internal locus of control. A regression analysis was used to examine the influence

of LOC on the amount of liability attributed to the defendant. Research question one

considers juror's multigroup membership influence on the liability decision. This

question takes juror's race, gender, and education into consideration when analyzing the

interaction between the two. An analysis of variance between member's race and

education and the liability decisions helps us understand the interaction between the two.

An independent samples *t*-test was also used to analyze the relationship between political

affiliation, Republican and Democrat, and liability to test the relationship. Research

question two considers how jurors who override the experiential system attribute liability.

An independent samples *t*-test was conducted to analyze the relationship between the

cognitive reflection test and liability.

To increase the validity and credibility of my research, I used three separate manipulation checks throughout the survey. Manipulation checks investigate the relationship between aroused empathy and persuasive effects of the messaging (O'Keef, 2003). To do this, I ask two questions about the emotional impact of the messaging, as well as a question regarding the amount of analytical consideration included in the decision-making process. The manipulation checks regarding emotion impact occurred initially following the case presentation and again after the eyewitness testimony statement. The manipulation checks did not detect significance between the case presentation or high and low eyewitness testimony; however, the analytical consideration revealed significance following the verdict form.

Ethical Considerations

This study includes possibly sensitive information and language. Participants will receive a content warning prior to the jury and case instructions about the highly emotional content. Participants will have the ability to leave the study at any time. The South Dakota State University mass communication introductory course received extra credit upon study participation. Other students, faculty, and personal contacts will not receive compensation. The content of this study requires several ethical considerations but is important to study for legal and research implications.

CHAPTER 4

Results

This chapter will present the results from 121 survey participants. These participants were recruited through a convenience sample of people over the age of 18 who agreed to the consent form. In order to preserve confidentiality, I have removed all participant identifiers by removing their IP addresses (which the survey software collects automatically) from the data set. In order to test the hypotheses and answer the research questions from this study, the following analyses were conducted.

Correlational analyses were used to examine the relationship between rational processing, experiential processing, and locus of control (powerful others, chance, internality). The correlations of experiential processing with rational processing and locus of control were not significant. Correlations with key variables are in Table 1 (Appendix H).

Manipulation Check. I tested the effectiveness of the perception manipulation and whether the subjects' experiential processing was influenced by the case presentation and eyewitness testimony. The first and second manipulation checks measured the perception of emotional impact after the case presentation as well as after the eyewitness testimony. The third manipulation check, following the verdict, measured the amount of rational consideration the participants used during their decision. Independent samples t-tests were used for all manipulation checks. The first manipulation check was asked following the case presentation. Manipulation check one was non-significant, $t(119) = -.42, p = .64$ The high unrelated detail eyewitness testimony group ($M = 44.27, SD = 23.72$) was not meaningfully different from the low unrelated detail eyewitness testimony

group (M = 46.14, SD = 24.86) and emotional impact. Manipulation check two, following the eyewitness testimony, was non-significant, $t(199)$ = .42, p = .87. This manipulation check indicated no difference between the high unrelated detail eyewitness testimony group (M = 40.76, SD = 23.45) and low unrelated detail eyewitness testimony group (M = 41.48, SD = 25.27) related to emotional impact. Lastly, a manipulation check was used to test subjects' rational processing effectiveness following the verdict form. This manipulation check was significant, $t(119)$ = 2.16, p = .032. The high detail group (M = 86.03, SD = 14.57) was meaningfully different from the low detail group (M = 79.00, SD = 20.85).

Guilt. H1 predicted that jurors who receive the high unrelated detail eyewitness testimony will find the defendant not guilty more than jurors who receive low unrelated detail eyewitness testimony. A chi-square test was conducted to determine if the high unrelated detail eyewitness testimony influenced the jurors' guilty verdict of the defendant. The results were significant, $\chi2(1)$ = 4.04, p = 0.04. The participants who received the high unrelated detail eyewitness testimony were more likely to decide the defendant was not guilty. Thus, H1 is supported.

Liability. H2 predicted that jurors with greater external locus of control will attribute liability to the defendant more than jurors with internal locus of control. A regression analysis was used to examine the influence of LOC on the amount of liability attributed to the defendant. The regression model was not significant, ($F(3,115)$ = .59, p = .61) with an R^2 of .015. Although overall model significance was not achieved, the influence of LOC follows the direction predicted. Model coefficients indicate that subjects with external LOC (powerful others) attribute more liability to the defendant, B

= 2.89, *SE* = 4.7, *p* > .001. Subjects with external LOC (chance) attributed more liability

to the defendant, *B* = 2.87, *SE* = 4.9 *p* > .001. Subjects with internal LOC (internality)

attribute less liability to the defendant, *B* = -1.05, *SE* = 5.1, *p* > .001. This is consistent

with H2.

RQ1 asked how jurors' group membership influenced liability. Subjects' political

affiliation was used as one potential group choice in the analysis for this research

question. An independent samples *t*-test was non-significant, *t*(70) = 1.05, p = .29. There

was no difference between identifying as Republican (*M* = 29.48, *SD* = 24.69) and

identifying as Democrat (*M* = 35.13, *SD* = 22.11) in determining liability. Additionally,

education was used as another group choice in the analysis. A one-way ANOVA was

conducted to compare the effect of amount of education on the amount of liability

assigned to the defendant. An analysis of variance showed that the effect of education on

liability was non-significant, *F*(7,113) = 1.32, *p* = 2.5. These results related to liability led

to additional analysis; see below.

RQ2 asked how jurors' who override the experiential system attribute liability. An

independent samples t-test was non-significant, *t*(119) = -0.85, *p* = .39. There was no

significant difference between those who passed the CRT test (*M* = 30.41, *SD* = 21.01)

and those who did not (*M* = 34.23, *SD* = 25.33)

Additional Analysis

After initial analysis, H2 was further probed by analyzing the influence of rational

and experiential thinking (the rational-experiential inventory, REI) on the amount of

liability attributed to the defendant. The overall model achieved significance, R^2 of .15

F(2,114) = 10.25, *p* = .000). Model coefficients indicate that subjects inducted into

rational processing attributed less liability to the defendant, $B = -20.183$, $p = .000$.

Subjects inducted into experiential processing didn't indicate a relationship with liability

to the defendant, $B = -.64$, $p = .89$. Rational processing was the only significant predictor

of a decrease in defendant liability. Additionally, a regression analysis was conducted to

analyze the influence of REI on $N = 22$ participants who gave a monetary award. The

regression analysis was not significant, $(F (2,39) = 2.53$, $p = .09)$ with a R^2 of .115.

Rational $(B = -19905.93$, $SE = 4.46$ $p = .09)$ and experiential $(B = 18189.58$, $SE = 4.53$ p

$= .24)$ processing were not predictors of monetary award.

Furthermore, analysis of the relationship between LOC and the damages awarded to

the victim was conducted. The regression model was significant, $(F (3,40) = 6.39$, $p =$

$.001)$ with an R^2 of .324. Model coefficients indicate that subjects with external LOC

(powerful others) award more damages to the victim, $B = 28622.58$, $SE = 11820.06$, $p <$

$.02$. Subjects with external LOC (chance) was non-significant, $B = 18089.37$, $SE =$

11545.95, $p > .13$. Subjects with internal LOC (internality) awarded more damages to the

victim, $B = 29917.86$, $SE = 12189.62$, $p < .02$.

CHAPTER 5

Discussion

This chapter will provide further insight and analysis on the hypotheses and research question, the theoretical and practical implications from the results of the study, limitations of the study, and areas for future research. The results of this study further confirm CEST as a jury decision making model and begin to showcase the use of attribution theory in jury decision-making research.

Analysis Interpretations

This study was conducted to test the influential factors that impact jury decision-making. CEST can account for how irrelevant factors impact jury decision-making, and attribution theory offers a perspective to understanding liability attributions to further understand juror biases. This thesis has argued CEST rational and experiential information processing components allow jurors to process high rational and high experiential information simultaneously. Co-occurrence of both systems then relies on jurors to actively override their intuition to use rational cognitive processing to come to a veracious verdict. Additionally, attribution theory can account for juror information interpretations and biases that occur during information processing. Overall, the results showed that eyewitness testimonies have an impact on jury decision-making. The results also suggest locus of control is an influential factor on verdict outcomes.

H1 was supported in this study. This predicted that participants in the high unrelated detail eyewitness testimony would be more likely to find the defendant not guilty. Participants indicated that there was not a strong emotional impact from the high or low unrelated detail eyewitness testimony in the manipulation check; however, the

results of the chi-square test confirm hypothesis one and indicate that participants who received the high unrelated detail eyewitness testimony found the defendant not guilty more than the participants who received to the low unrelated detail eyewitness testimony.

The next hypothesis shifted focus to attribution theory, specifically locus of control, as a predictor for defendant liability. H2 did not achieve significance; however, it trended in the predicted direction of the study. Participants with a stronger sense of external LOC, those who rely on powerful others and chance, attributed greater liability to the defendant. This result supports the attribution theory of responsibility. The Weiner (1995) proposed model is applicable in this case in regard to a juror's LOC: thinking (perception of responsibility), emotions (anger and sympathy), and actions (interpersonal evaluation). If the juror perceives the accident to be caused by contributing external factors, eliciting sympathy for the victim, the juror also perceives those external factors to be more responsible for the problem, contributing to causal attribution resulting in higher liability associated with the defendant rather than the victim. Jurors that make inferences about the environment and situation possess an external locus of control (Rotter, 1966; Grubb & Turner, 2012) which would result in low levels of blame of the victim and high responsibility for the defendant.

The correlational analysis results indicate individuals who have an internal locus of control (internality) also experience rational thinking. In contrast, individuals who have a greater external locus of control (chance) tend to have less rational processing, as these variables have a negative correlation. Additionally, external locus of control (powerful others) has a negative correlation with rational processing. These results support the findings of H2. Jurors who had an internal locus of control found the

defendant less liability, thus relying on rational processing. Although H2 was not

supported, the relationship trend between LOC and liability, as well as LOC and rational

processing, should not be dismissed from future research and implications.

Jurors with a stronger internal LOC associated less liability to the defendant.

Fundamental attribution error offers another explanation to jurors assigning lower

liability to the defendant. Individuals making an attempt to understand others' behaviors

and intentions (Moran et al., 2014) put themselves in the position of the defendant and

the victim. Jurors with an internal LOC overestimate the dispositional factors of the

victim, such as his feeling of invincibility from the high unrelated detail eyewitness

testimony, would result in the jurors attributing more liability for the accident to the

victim; thus, resulting in less liability to the defendant.

RQ1 asked whether jurors' group memberships influence liability. The analysis

showed that participants' political affiliation did not significantly influence their liability

decision. Political affiliation was chosen for possible influential group membership

because Democrat and Republican political affiliations can be considered extremes

(Mutz, 2018, Sunstein, 2000). The result may have achieved significance if the political

affiliations were truly extremes. However, of the 76 participants that indicated they

identify as Republican, 46 of them identified their strength of political affiliation as *weak*

Republican. Thus, the party identification was less extreme. Additionally, race was

initially chosen for a possible influential group membership; however, more than 90

percent of my participants identified as white ($n = 115$). More research must be

conducted to determine if race could be a jury decision-making influential factor,

particularly through the recruitment of minority participants. These results do not align

with bona fide group perspective, although multigroup membership is important in future

jury decision-making research.

RQ2 asked how jurors who override the experiential system attribute liability. The

analysis indicated that participants who answered the CRT question (e.g., a bat and ball

cost $1.10 in total. The bat costs one dollar more than the ball. How much does the ball

cost?) correctly did not exhibit meaningful differences from those who answered the

question incorrectly. Participants were inducted into high rational and high experiential

processing; thus, the co-occurrence of the systems worked together, ultimately

influencing one another's operation (Epstein, 2003)

Additional analysis was conducted to further probe H1 to analyze the influence of

rational-experiential inventory (REI) on the amount of liability attributed to the defendant

as well as the amount of damages awarded to the victim. The result indicated that

participants relying on the rational processing system attributed less liability to the

defendant. The results did not suggest a relationship between defendant liability and

experiential processing. Rational and experiential processing was not a predictor for

monetary award. Furthermore, powerful others and internality were predictors for

monetary award from the small sample ($N = 22$). Chance did not support a difference in

monetary award.

Cognitive-Experiential Self-Theory

This study has further confirmed CEST as a jury decision-making model. The

rational processing manipulation check following the verdict form was significant. The

experiential processing manipulation checks following the case presentation and

eyewitness testimony were non-significant. This finding supports the post-hoc analysis of

REI. Experiential processing has no relationship to jurors attributing liability to the defendant. The experiential processing was non-significant in predicting the outcome of liability. This trend was expected when participants indicated that they were not emotionally influenced by the case presentation or the eyewitness testimony. On the other hand, the final manipulation check for rational processing was significant. The participants indicated that they rationally analyzed the evidence of the case. This manipulation check also supported the post-hoc analysis of REI. The rational processing predicts how liability is attributed. Understanding CEST has implications in the legal field. Attorneys' knowledge of rational and experiential processing will help prepare for strategies when going to trial. CEST's high experiential processing allows jurors' emotions to overcome rational thinking. Case presentations can activate both rational and experiential processing simultaneously. Attorneys can use this finding to influence case presentation by equally presenting emotional and analytical information for jury members to process.

The important contribution from this study is the evidence that the high unrelated detail in the eyewitness testimony influenced the verdict. This study argues that jurors are inducted into high rational and high experiential information processing from the case presentation and the eyewitness testimony. Participants indicated they had an average of 45 percent emotional impact from the case and 41 percent emotional impact from the eyewitness testimony. Individuals engaged in a co-occurrence of the two systems are still susceptible to the influence of irrelevant factors. The results of the third manipulation check achieved significance, with participants using analytic consideration of the information presented to make their decision. Participants were unaware of the impact the

high unrelated detail had on their verdict. The civil case study further supports the uniqueness of CEST co-occurrence allowing for both systems to function simultaneously, as participants rely on both analytical and emotional processing to make a decision. This relationship could be a predictor for guilt attributed to the defendant. This is consistent with the argument that a combination of the two processes is used to process narratives (Polavin, 2019). Communication research may offer an explanation of the impact of narrative processing.

Transportation

Jurors who receive the high unrelated detail eyewitness testimony were more likely to find the defendant not guilty. This study examined narratives in communication research as an explanation of this influence. Jurors use past experiences to explain behaviors and fill in the gaps in the narrative presentation (Pennington & Hastie, 1992). The jurors that did not receive the high unrelated detail likely used their prior experiences to fill the gaps of unrelated detail in testimony. The low unrelated detail did not include any irrelevant detail about who the victim was. Jurors who do not have a complete story, relying on their experiences, may have experiences with a different emotional impact than those who received the high unrelated detail testimony. The result of this study conveys the importance of detail. When jurors rely on narratives and transportation to understand the evidence of a case, they are likely using the experiential system to guide the rational system. The experiential system encodes information with narratives and images (Epstein, 1994). During an attorney's case preparation and witness preparation, refining the narratives both parties present is imperative to creating a story the jurors can transport into. Attorneys and witnesses must present both emotional and analytical detail

without leaving unclear gaps that may lead to jurors relying on the experiences to draw conclusion during the narrative transportation. Giving jurors the responsibility to fill the gaps of the story may lead to bias resulting in an influence to outcome of the verdict.

Identification

Communication research of narratives investigates not only transportation into the narrative story but also the characters within the story (Green, 2002). Identification with characters is one component through which narratives can change attitudes (Slater & Rouner, 2002). I believe identification with the characters (defendant and victim) explains the significance of the high unrelated detail eyewitness testimony leading to finding the defendant less liable. This practical application within the legal field will impact witness preparation. Eyewitnesses tell a story about what they witness at the scene of injustice. Attorneys should prepare the witnesses to tell the best story with relevant and irrelevant information for jurors to fully understand the details of the case and the character of the victim or defendant. In this study, the defendant was found less liable because of the character the eyewitness created for the jury. As the literature and results for this study suggest, a shift in attitude towards a character in the narrative might be a deciding factor in the verdict. A future study could examine a variety of factors influencing an identification shift with the characters in the case. Future researchers can examine eyewitness testimony with the same goal told by two different characters and consider potential influences in the outcome of the verdict. Another important factor to consider is race. This may be particularly true if one considers the race of both the juror and the victim in a case; is there more identification if a juror shares the race of the victim?

The juror's identification with the character (victim) shift in this study resulted from a single sentence difference between the high unrelated detail eyewitness testimony and the low unrelated detail eyewitness testimony. The wife said "He thought he was invincible" when referring to him jaywalking while using his cell phone. The irrelevant factor of *invincibility* changed the character (victim), thus altering the jurors' perception of the victim. This change in character leads to a less sympathetic perspective of the victim from the jurors, altering their attitude toward him. As indicated in the results, preparing a witness for trial testimony should elicit a change of attitude toward the party involved in the case. The high unrelated detail changed the juror's perception about her husband (the victim) influenced the jurors to attribute less liability to the defendant.

Group Membership

The way group membership impacts jury decision-making will require more research to accurately predict how impactful they might be. Bona fide group perspective is often studied in a natural forming group (Putnam & Stohl, 1996). This requires a group to meet in-person where deliberations and questions can make an impact. One form or group membership analyze was the participants' political affiliation, Republican and Democrat. Republican and Democrat political affiliations are not considered true extremes because political affiliation occurs on a spectrum. To find the true extreme within a political affiliation or ideology, future researchers should consider asking common politically polarizing views. For example, Van Swol (2009) studied extreme members and group polarization by asking participants to rate their opinion about the decriminalization of marijuana on a 1 to 9 scale and then discussed the issue in three☐person groups. He found those with more extreme views on the issue were more polarizing, confident, and

vocal in discussion (Van Swol, 2009). This could be replicated partially in a survey or fully in a small focus group.

Although both group memberships analyzed in this study lead to insignificant findings and my sample did not provide enough diversity to analyze race, bona fide group perspective should still be considered when analyzing juries. On an individual level of jury decision-making, multigroup membership does not impact the outcome; however, multigroup membership may impact jury deliberations, ultimately influencing unanimous decisions made by the jury as a group. The study of juries cannot be confined to an online survey thus, ignoring the value of group deliberation.

Future researchers can approach studying group membership by employing mixed methods research. First, researchers should conduct an online survey with a goal to recruit a wide sample who offer diverse group memberships. Some memberships to consider include but are not limited to race, education, income, political affiliation, and gender identity. The online survey should include the instruction, case presentation, any additional evidence, as well as verdict form. Following the survey, researchers should examine jury decision-making and verdict outcomes through a mock trial focus groups in groups of twelve people, more closely mimicking the jury experience, with the survey participants. Using mixed methodology to gain a better understanding of the group interaction influencing a verdict outcome. Analyzing changes in verdict outcome and juror deliberation may show biases. Understanding the impacts of group membership on jury decision-making may have major implications on jury selection. Further research should be conducted to determine whether extreme members should be struck from the jury or communicated with differently through case presentation and testimony.

Limitations

There are some limitations to this study to consider when employing applications. Although hypothesis one was significant and hypothesis two was not, I believe the determining factors were methodological limitations to this study. The results of hypothesis two are consistent with jury decision-making in relation to LOC. Although hypothesis two was not supported, I believe the support from the data demonstrates consistencies with LOC. A larger sample size from a sample that goes beyond a convenience sample may result in achieving significance; further research will need to be conducted. Additionally, locus of control may have different implications based on personal experiences, creating a strong connection with CEST. For example, if a participant has been in a car accident, they may identify with the defendant more than those who have not. I suggest looking at the internal locus of control from the perspective of both the defendant and the victim in relation to the verdict. I believe these reasons are a likely explanation; however, more research is necessary. This study could also achieve greater external validity by screening participants to simulate the process of a real jury would. Requiring jurors to fill out a form to indicate prior experiences related to the case would more closely replicate the experience of being on an actual jury. During the pre-trial jury selection process, counsel may excuse jurors "for cause" or peremptory challenges. Eliminating jurors "for cause" requires proof that potential jurors' biases may prevent them from making decisions based solely on the evidence presented at trial. Peremptory challenges eliminate potential jurors without reason in cases where counsel believes that jurors may be biased if judges reject a "for cause" removal (Babcock et al., 1993; Rose, 1999). These two conditions should be taken into consideration for future

work, further examining exclusion of jurors who would have possible biases toward the case.

There are also methodological limitations of the study. The Internality, Powerful Other, and Chance (IPC) scale achieved reliability for the powerful other and chance subscales, but the scale did not achieve suitable reliability from the internality subscale. This may be a contributing factor to the result of H2 not reaching significance but trending in the pattern predicted. Future improvements to this scale may impact the outcome of LOC when compared to other variables. Reverse coding within the IPC scale is to avoid respondent biases and avoid inattention. Reversing some items by reversed worded items, may decrease item difficulty for those respondents that can agree with the reversed items. However, reversed coding may lead to more bias due to confusion for the other respondents (Sonderen et al., 2013). The internality subscale did not reach reliability, likely cause by participant confusion for reverse coded items. Furthermore, I consider the importance of attorneys understanding the influence of a juror's locus of control. Internality, chance, and powerful others measure three different constructs, and each subscale requires significant recoding. The use of a different LOC scale would be more conducive to practical use for attorneys and possibly result in greater reliability in qualitative analysis.

Additionally, this study did not have a diverse sample collected. A diverse sample is necessary to understand how LOC, case presentation, and eyewitness testimonies impact jury decision-making. Adjustments to recruitment for future research can be made.

Finally, this study is not conducive to extensive jury duty. The survey took place online, took approximately 15 minutes to complete, jurors read the case presentation and

eyewitness testimony, there was no deliberation, and no opportunity for the jurors to ask questions. To overcome these differences, I included some characteristics that would be similar to a jury experience. The survey included a convenience sample of participants who were 18 years of age or older. The case information was similar to a case a juror would hear in court. There are, however, some different characteristics to the survey than what jurors would experience in the courtroom, which may contribute to a change in outcomes.

Directions for Future Research

This study offers a variety of insights into jury decision-making. Future research can continue to analyze the variable in this study or conduct a deeper analysis into individual pieces. First, to strengthen juror identification, a study could be conducted using high/low unrelated details told by two different characters all with the same goal. This could be measured with thought-listing during the narrative. This could also be measured through a verdict form and subsequently analyzing the difference or similarities in a verdict. Next, to more rigorously test the relationship between locus of control and jury decision-making, a study should test the relationship between internal/external control and perceptions of both the defendant and the victim. The research could ask about liability for both parties, for instance. This would strengthen the research about LOC predicting verdict outcomes.

Future research can utilize a similar study design with a criminal court case. In this study I used a civil case rather than a criminal case. Jurors serving in a criminal courtroom must achieve a unanimous decision through jury deliberation. The online survey of this study was not conducive to a deliberation period. To reach a unanimous

decision within a study the researcher will need to change to mixed methodology or

quantitative analysis of a focus group. Small group research can be conducted to analyze

the impact of multigroup membership of a bona fide group reaching a verdict by allowing

time for deliberation and question. This would exemplify more qualities of a real-time

jury versus an online survey.

Additionally, future researchers should consider the factor of the victim's race. Here,

I considered only perceptions of the victim's attitude. I did not measure other influential

factors that would be relevant to the perception of the victim. Researchers can use an

online survey experiment including two narrative case presentations, a verdict form, and

LOC. The two narrative cases can be randomly assigned to participants utilizing the same

case; only the victim's race will be manipulated, with one case where the victim is White,

and one case where the victim is Black. Researchers must continuously expand field.

Conclusion

This research aimed to identify a theoretical framework to predict jury decision-

making. Based on a quantitative analysis of CEST, LOC, and the final verdict, it can be

concluded that CEST is an effective model for jury decision making and LOC influences

jury decision-making. The results indicate that jurors who receive high unrelated detail in

eyewitness testimonies are more likely to find the defendant not guilty. While LOC limits

the generalizability of the results due to non-significance, this theoretical approach

provides new insight into the attributions jurors make during the decision-making

process. Future research is needed to determine the relationship between LOC, narrative

case presentation, and identification.

   The purpose of this study was to understand jury decision-making and build a unified framework to predict future jury decisions by analyzing mock jurors' loci of control, narrative case presentation, and verdicts via CEST. This study has begun to build a unified framework while opening new opportunities to utilize attribution theory from a different perspective. This study showed that CEST can help predict the type of information jurors will identify with, consider, and if it will alter their decision. In the future some methodological problems should be solved regarding the narrative presentation and predictor variable. Overall, CEST and attribution theory can be unified to predict jury decision-making.

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APPENDIX A

Statement of Permission

Jade Larson has my permission to use and edit for her purposes, stimulus materials from Cognitive-Experiential Self-Theory in Jury Decision Making. From Dr. Nick Polavin, on March 31, 2021

APPENDIX B

Internality, Powerful Others, Chance, Scale

Instructions. Consider the following statements and rate your agreement (1 = strongly

disagree, 5 = strongly agree).

1. Whether or not I get to be a leader depends mostly on my ability.

2. To a great extent my life is controlled by accidental happenings.

3. I feel like what happens in my life is mostly determined by powerful people.

4. Whether or not I get into a car accident depends mostly on how good a driver I

am.

5. When I make plans, I am almost certain to make them work.

6. Often there is no chance of protecting my personal interests from bad luck

happenings.

7. When I get what I want, it's usually because I'm lucky.

8. Although I might have good ability, I will not be given leadership responsibility

without appealing to those in positions of power.

9. How many friends I have depends on how nice a person I am.

10. I have often found that what is going to happen will happen.

11. My life is chiefly controlled by powerful others.

12. Whether or not I get into a car accident is mostly a matter of luck.

13. People, like myself, have very little chance of protecting our personal interests

when they conflict with those of strong pressure groups.

14. It's not always wise for me to plan too far ahead because many things turn out to

be a matter of good or bad fortune.

15. Getting what I want requires pleasing those people above me.

16. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.

17. If important people were to decide they didn't like me, I probably wouldn't make many friends.

18. I can pretty much determine what will happen in my life.

19. I am usually able to protect my personal interests.

20. Whether or not I get into a car accident depends mostly on the other driver.

21. When I get what I want, it's usually because I worked hard for it.

22. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.

23. My life is determined by my own actions.

24. It's chiefly a matter of fate whether or not I have a few friends or many friends.

APPENDIX C

Case Instructions

Case Instructions. You will be presented with a case that is a civil lawsuit. In the case, the plaintiff is suing the defendant over a pedestrian-car accident that resulted in the unfortunate and gruesome death of the pedestrian. The pedestrian's wife is suing the driver of the car for damages. These damages include the cost of the funeral as well as pain and suffering damages for the family of the man who died. The plaintiff and the defendant dispute who is at fault for the accident. Both sides have legitimate claims and we're asking you to reach a decision about who should win this case. Please pay attention for the duration of this case as you will be asked to reach a decision about a situation that is **very emotional and sensitive**, and very important for **both parties financially**. Reaching this decision may not be easy because you will be asked to **determine the percentage of liability** that each party has and may need to decide **what amount of money** is the most **accurate** level of compensation based on **graphic and upsetting evidence**. Nevertheless, we ask that you consider all information and **take the time to put yourself in the shoes of both parties but also to view this case as an unbiased 3rd party**. When **calculating liability and damages**, it is okay to rely both on the **facts** presented and the **emotions you feel** for the parties in the case. We ask that you try your best to reach a **fair** and **accurate** verdict.

APPENDIX D

Jury Instructions

Jury Instructions. During this case, you will be exposed to some exhibits and witness statements. One exhibit is a photograph of the location where the man was struck with **numerical information** about how the accident occurred, and another is a **graphic and vivid** photograph of the man at the location where he was struck. You may find these pictures somewhat **upsetting**, but hopefully useful in **determining the percentage of liability** for both parties. In addition, you will hear testimony from a number of witnesses, which should provide you with **accurate** information about what happened but may also be **graphic in nature and produce a strong emotional reaction in you**. After you hear the evidence, you will be asked to **mathematically calculate liability and any monetary damages** to be awarded to the plaintiff for their **pain and suffering**.

APPENDIX E

Case Presentation

Plaintiff's Case

Overview. A fatal pedestrian-car accident occurred on 2nd Avenue, just south of Hill

Street on

Sunday, May 6, 2018, at approximately 5:22 p.m. This resulted in the tragic death of

Kevin Hughes, who was the husband of the Plaintiff, Michelle Hughes. It was determined

that he died from blood loss due to an accident with the defendant. The defendant hit

Kevin Hughes as Kevin was walking across the street in the left lane of 2nd Avenue. This

caused Kevin to lose a large quantity of blood and his consciousness. Ultimately, Kevin

died at the scene of the accident. Although Brian Healy was not driving too fast, the

collision that involved Kevin Hughes' head struck the hood, and being dragged 25 feet

did enough harm to him that he was unconscious, life-less, and bled out on the road.

Accident information. Defendant Brian Healy was driving West on Hill Street preparing

to take a left turn onto 2nd Avenue in his 2013 Chevy Impala. Brian Healy had a green

arrow and turned left onto 2nd Avenue. Brian Healy was traveling at a legal speed,

approximately 25 MPH as he

accelerated onto 2nd Avenue. Kevin Hughes was crossing 2nd Avenue from east to west.

Kevin Hughes was not in the crosswalk, nor did the crosswalk say pedestrians could

cross the street at that time. Kevin Hughes jaywalked about 30 feet south of the crosswalk

across 2nd Avenue. Kevin Hughes was in the left lane of the southbound direction of 2nd

Avenue. Brian Healy turned into the left lane (the first available legal lane) and soon after

hit the victim, Kevin Hughes. The right side of Brian Healy's vehicle pummeled into

Kevin Hughes. Kevin Hughes' head smashed into the hood of the car before he was thrown over to the passenger side of the vehicle. Brian Healy immediately slammed on the brakes to stop the vehicle. Kevin Hughes was dragged for approximately 25 feet on the pavement before the vehicle came to a complete stop. Once the vehicle stopped, Kevin Hughes' body toppled from the hood of the car into the lane immediately to the right of the accident. Traffic stopped because of the accident and no other vehicles hit Kevin Hughes. A witness, Kevin Hughes's friend, who was on the sidewalk ran out into the road and realized Kevin Hughes did not have a pulse and was severely injured. She yelled for someone to call 911. The woman gave CPR to Kevin Hughes while the ambulance was on its way. By the time paramedics arrived, Kevin Hughes had lost too much blood and he was pronounced dead. Although Brian Healy was not driving too fast, the collision that involved Kevin Hughes' head hitting the hood of the car, and being dragged 25 feet did enough harm to him that he was unconscious and bled out on the road.

Victim information. Michelle Hughes, the plaintiff in this case, was married to Kevin Hughes. Together they have two children who are both in high school. Michelle Hughes is suing Brian Healy for the cost of the funeral as well as pain and suffering damages. The funeral costs were $7,000. Michelle Hughes is asking for $200,000 for pain and suffering damages. Pain and suffering damages is the money awarded to plaintiffs for the problems they have faced that do not have a price with them (e.g., mental suffering, loss of enjoyment of life, loss of companionship, etc.).

Accusation of negligence. The Plaintiff admits that Kevin Hughes was jaywalking, which is not legal. But a driver can still be at fault when they hit a jaywalking pedestrian

if they had the chance to stop or avoid the pedestrian but failed to do so. A driver is required to be alert to what is around them and to pay attention to hazards in the road. Consequently, drivers have a legal obligation to see and avoid what is there to be seen. The Plaintiff believes that Brian Healy was not paying attention to his surroundings and had the opportunity to stop or at least avoid hitting Kevin Hughes. Kevin Hughes was crossing the street about 30 feet south of the intersection, giving Brian Healy enough time to stop or at least avoid hitting Kevin Hughes. The accident occurred during daylight, so Brian Healy should have been able to see Kevin Hughes.

Defendant's Case

Brian Healy did not see Kevin Hughes until it was too late to stop, and therefore, should not be held responsible for this accident. Brian Healy did not do anything illegal – Kevin Hughes did. Kevin was not in the crosswalk nor did the crosswalk sign say pedestrians could cross at the time. The bright sun was in the sky to the west, behind the traffic light that Brian Healy was looking at before turning making it extremely difficult for him to see. Brian Healy was accelerating as he turned onto 2nd Avenue. It took Brian Healy a second to realize there was a person in the middle of the lane and that he needed to slam on the brakes. Brian Healy had to take his foot off the accelerator and slam on the brakes. The Highway Safety Code claims that it takes drivers at least .67 seconds to react to something and start braking. 0.67 seconds at 25 MPH is 25 feet. Therefore, the average driver would have been very close to Kevin Hughes by the time they started braking.

APPENDIX F

Eyewitness Testimony Statements

High Unrelated eyewitness testimony from the Plaintiff. "I saw it all happen as I was walking on the sidewalk towards the intersection. The driver hit my husband he hit his head on the hood hard. His body rolled off to the side of the car. He was dragged for a bit before the car finally stopped. He looked like he was hurt really badly, so I immediately ran out to him. When I got to my husband, he was unconscious and bleeding badly. I yelled for someone to call the police as I started doing CPR. The paramedics arrived a few minutes later and said there was nothing they could do. I couldn't believe it because the car wasn't going that fast. My husband was not paying attention because he was on his phone. **I swear he thought he was invincible.** I was so focused on my husband I wasn't able to tell when the driver started to brake. But it seemed like he didn't try to swerve to avoid hitting the pedestrian. Obviously, people should cross the road at a crosswalk and put their phones down, but it also seems like the driver could have been able to do something to avoid the accident if he was actually paying attention to where he was going."

Low Unrelated eyewitness testimony from the plaintiff. "I saw it all happen as I was walking on the sidewalk towards the intersection. The driver hit my husband he hit his head on the hood hard. His body rolled off to the side of the car. He was dragged for a bit before the car finally stopped. He looked like he was hurt really badly, so I immediately ran out to him. When I got to my husband, he was unconscious and bleeding badly. I yelled for someone to call the police as I started doing CPR. The paramedics arrived a few minutes later and said there was nothing they could do. I couldn't believe it because

the car wasn't going that fast. My husband was not paying attention because he was on his phone**.** I was so focused on my husband I wasn't able to tell when the driver started to brake. But it seemed like he didn't try to swerve to avoid hitting the pedestrian. Obviously, people should cross the road at a crosswalk and put their phones down, but it also seems like the driver could have been able to do something to avoid the accident if he was actually paying attention to where he was going.

APPENDIX G

Rational☐Experiential Inventory–40

Instructions. Consider the following statements and rate your agreement (1 = strongly

disagree, 5 = strongly agree).

Rationality Scale

Rational Ability

1. I'm not that good at figuring out complicated problems*

2. I am not very good at solving problems that require careful logical analysis*

3. I am not a very analytical thinker*

4. Reasoning things out carefully is not one of my strong points*

5. I don't reason well under pressure*

6. I am much better at figuring things out logically than most people

7. I have a logical mind

8. I have no problem thinking things through carefully

9. Using logic usually works well for me in figuring out problems in my life

10. I usually have clear, explainable reasons for my decisions

Rational Engagement

11. I try to avoid situations that require thinking in depth about something*

12. I enjoy intellectual challenges

13. I don't like to have to do a lot of thinking*

14. I enjoy solving problems that require hard thinking

15. Thinking is not my idea of an enjoyable activity*

16. I prefer complex problems to simple problems

17. Thinking hard and for a long time about something gives me little satisfaction*

18. I enjoy thinking in abstract terms

19. Knowing the answer without having to understand the reasoning behind it is good enough for me*

20. Learning new ways to think would be very appealing to me

Experientiality Scale

Experiential Ability

21. I don't have a very good sense of intuition*

22. Using my gut feelings usually works well for me in figuring out problems in my life.

23. I believe in trusting my hunches

24. I trust my initial feelings about people

25. When it comes to trusting people, I can usually rely on my gut feelings

26. If I were to rely on my gut feelings, I would often make mistakes*

27. I hardly ever go wrong when I listen to my deepest gut feelings to find an answer

28. My snap judgments are probably not as good as most people's*

29. I can usually feel when a person is right or wrong, even if I can't explain how I know

30. I suspect my hunches are inaccurate as often as they are accurate*

Experiential Engagement

31. I like to rely on my intuitive impressions

32. Intuition can be a very useful way to solve problems

33. I often go by my instincts when deciding on a course of action

34. I don't like situations in which I have to rely on intuition*

35. I think there are times when one should rely on one's intuition

36. I think it is foolish to make important decisions based on feelings*

37. I don't think it is a good idea to rely on one's intuition for important decisions*

38. I generally don't depend on my feelings to help me make decisions*

39. I would not want to depend on anyone who described himself or herself as intuitive

40. I tend to use my heart as a guide for my actions

Note. Items marked with an asterisk (*) should be reverse coding prior to scoring.

APPENDIX H

Table 1
Descriptive Statistics and Correlation Coefficients for Study Variables

Variables	M	SD	1	2	3	4
1. Rational	3.7	0.5				
2. Experiential	3.4	0.5	-0.062			
3. Powerful Others	2.7	0.6	-0.206*	0.001		
4. Chance	2.6	0.5	-0.278**	0.022	0.525**	
5. Internality	3.6	0.5	0.208*	0.099	-0.259**	-0.227**

$**p < 0.01$ (2-tailed); $*p < .05$ (2-tailed); $N = 119$