

Emotions on Trial: The Power of Juror Emotions on Sentencing Decisions

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by

Isabella N. Landino

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Abstract

The purpose of this study was to examine how different types of emotions play a role in influencing decision making for pre-deliberation jurors in the courtroom. Literature suggests that jurors' emotions of anger will have a stronger effect on punitiveness than emotions of sadness. It was thus hypothesized that angry jurors and severely emotional victim impact statements will result in longer sentencing decisions. Participants ($N=176$) answered an online questionnaire where they were randomly assigned to an emotion-inducing film clip (anger, sad, or neutral) and then required to read either a neutral or severely emotional vignette about a burglary case. Finally, they were asked to give a sentencing length for the perpetrator in the burglary case, from either probation to 5 years in prison. Results indicated that the severely emotional vignette had a significant effect on harsher sentencing decisions. However, the video inductions, while they did generate some emotions in the jurors, did not impact sentencing lengths. These results suggest that jurors often are more influenced by the evidence itself and how it is worded, rather than by the emotions they are feeling before entering the courtroom. Thus, this finding contradicts previous theories and literature on specific emotions of anger influencing punitiveness more than sadness, garnering needed future research in this subject.

Emotions on Trial: The Power of Juror Emotions on Sentencing Decisions

On August 20, 1989, Kitty and Jose Menendez were shot dead in their Beverly Hills home, an event that made national headlines for years and is still known decades later (Mulvey et. al 2006). It was not until their son, Erik Menendez, was talking with his therapist about his parents' death that it was revealed that Kitty and Jose's murderers were their own sons, Lyle and Erik. Their ensuing trial -which culminated in a first-degree murder conviction- framed their motive as the sexual abuse that Lyle and Erik endured by their father for most of their life. The aim of their defense was to tap into the emotions of the jury and allow them to understand Lyle and Erik's fear for their lives, while the prosecutors framed them as lying, cold-blooded killers. In their trial, gruesome pictures, audio recordings, and detailed testimonies, were meant to emotionally influence the jurors and create an intensity to the reasoning behind their murders. Such practices are ubiquitous in the courtroom setting, where evidence and emotions that jurors bring to the courtroom elicit many feelings, such as anger and sadness amongst a jury. Appealing to emotions has been utilized throughout the course of not just the Menendez trial, but many others throughout history.

Emotions in the Courtroom

The Menendez brothers' case leaves many wondering if their defense strategy was effective. Ultimately, is there any evidence that emotions in the courtroom have an impact on jurors? Emotions are very often at play in a courtroom, both generally from feelings before entering the courtroom, and also from the evidence being presented to a jury. For those studying emotions in the courtroom, *mock jurors* or *fake jurors* are often used to examine induced emotions amongst jurors, and present cases in which researchers want to measure elements such

as sentencing, evidence presentation, or biases of jurors. A type of mock jurors often used is *pre-deliberation jurors*, or single jurors who do not come together as a group to deliberate on sentencing decisions. However, rather than creating a mock-jury, Caviness (2021) studied the experience of actual jurors to better understand the individual experiences they faced and to add to the literature on mock-juries. One of the leading issues they mentioned was the emotional response to the experience of being a juror. Ultimately, this continues to leave many wondering if such emotions impact decision making in the court.

The study conducted by Caviness (2021) attempted to conceptualize the experiences of real jurors who have been through a trial. While other research in this field may focus on the use of mock jurors, their results demonstrated a more realistic representation of emotions in the courtroom, since they used past jurors. As described by Caviness when discussing emotions in the court, oftentimes the emotions of jurors during trial experiences are disregarded as unimportant in comparison to those of witnesses, victims, prosecutors, and defendants (2021). Thus, using the evidence of their research, they believe psychologists can better formulate an idea of what jurors go through. From their study, they found five common themes in the issues that jurors faced: negative experience of decision making; weight of the decision of changing the direction of someone's life; feeling like an asset to society; positive experience of decision making; and emotional responses to trial periods (Caviness 2021).

Of these themes, the most prominent is the emotional response to being a part of a jury. The pattern found amongst the real jurors that they interviewed demonstrated this intense emotional feeling that carried with them throughout the trial (Caviness 2021). Throughout their time serving on a jury, many found themselves feeling burdened by the weight of the trial, even outside of the courtroom. They carried with them the emotions of the court throughout their daily

lives and were constantly overwhelmed by these intense feelings. When discussing this emotional state that the jurors were in, Caviness describes how many people believe jurors use their cognitive and logical skills when examining evidence, thus reaching an intellectual verdict (2021). Yet, their sample suggests that their experiences on a jury were more complex and connected with their emotions and the emotions of others. To put simply, jurors are expected to be analytical and realistic in terms of their decision making at the end of the trial. However, what is not considered is the reality that they experience many emotions at once: their own and that of others participating in the trial. What can be gathered from this is that jurors carry a lot more emotions than expected, since they are often thought of as being more logical and unemotional. However, in reality, jurors have the burden of listening to, watching, and understanding evidence placed before them, while also having to decide the fate of another person's life- all in one courtroom.

Emotions from a Psychological Perspective

Structural Components of Emotion

When examining the emotions surrounding the courtroom experience, it is important to note the implications of emotion and motivation as seen from a biological and cognitive perspective. Emotions are complex psychological and physiological responses to stimuli, influencing how we think, feel, and behave. Thus, basic emotions play a major role in everyday cognitive functioning and social interactions, interacting with one another in higher order cognitive processes to create an emotional experience and behavioral outcome (Tracy & Randles 2011). They are typically triggered by external events or internal thoughts, and involve several components, including physiological changes, cognitive appraisal, and behavioral reactions

(Spielman et. al 2020). First, physiological responses involve changes in the body, such as increased heart rate or sweating, triggered by emotional stimuli. Secondly, cognitive appraisal refers to the mental process of evaluating and interpreting a situation, which shapes how an emotion is experienced. Finally, behavioral expressions encompass the outward signs of emotion, such as facial expressions, body language, or vocal tone, which convey emotional states to others. This combination of physiological responses, cognitive appraisal, and behavioral expressions works together to create the complex experience of emotion (Spielman et. al 2020).

Of note when examining emotions are the many psychological and neurological mechanisms happening while someone is experiencing these emotions (Inman et al. 2020). For example, the amygdala is a very important part of the brain that plays a role in emotional processes, memory, and motivation (Spielman et. al 2020). It helps detect emotional stimuli and triggers appropriate responses, such as the "fight or flight" reaction to perceived threats. The amygdala also interacts with other brain regions, like the prefrontal cortex, to evaluate emotional situations and regulate responses. While it is most closely associated with fear, the amygdala is involved in the processing of a wide range of emotions, including happiness, anger, and sadness, and plays a key role in emotional memory formation (Spielman et. al 2020). However, it is also important to note the debate within cognitive neuroscience concerning the neural representations of emotions (Inman et al. 2020). Specifically, how the amygdala is not the only region involved in emotion processing, production, and recall. It may not just be individual brain regions involved in emotion, but also multiple regions across different networks.

Emotions serve important functions, helping us respond to challenges, communicate with others, and make decisions. While they are universal, cultural and individual differences can shape how emotions are experienced and expressed (Tracy & Randles 2011). From these

findings we can understand how emotions impact decision making in terms of the psychological and neurological processes occurring in the brain. As a result, emotions can both enhance and sometimes hinder our ability to make rational decisions, depending on how they are processed and managed.

Theories of Emotion and Motivation

Unfortunately, it is difficult for psychologists and neuroscientists to distinguish between the processes of emotion and motivation. As described by Berridge when discussing modern approaches to emotion and motivation, it is often believed that affective reactions and emotions occur both as an unconscious, implicit process and subjective feelings (2018). The essence of their argument is that responses to emotions are both automatic processes and individual internal experiences. To put simply, there are objective emotional reactions and subjective emotional feelings (Berridge 2018). Thus, the two sides to emotions are our innate reactions and behaviors, as well as the emotions we are able to express. This distinction can help us separate the actual emotions that a person experiences and the behaviors that result from their emotions. Therefore, the cognitive processes of emotions, and the actions and behaviors that are prompted by them, are separated into *emotion* and *motivation* by psychologists.

However, there are problems that can come from emotion-based decision making and actions. When discussing this issue, they believe that asking people to describe the emotional reasons for a response, may cause them to create incorrect accounts of their behavior (Berridge 2018). In making this statement, Berridge hypothesizes that when making decisions, people will often excuse their emotions as being the cause of their actions and behavior. The emotions present when participating in certain behaviors can thus lead to emotion-based justifications.

Emotions can cause behaviors that are problematic, especially in decision-making. When we have an innate reaction or decision that is based on emotions, we may unfortunately create false narratives of events. This dynamic may impact how we look at criminal sentencing.

Emotions' Impact on Decision Making

As described in terms of psychological processes, emotions also create influences on behaviors, such as the way people make decisions, especially in the law. Branching from the internal processes of emotions, there have been many approaches to understand the variables of decision making. For example, for the purpose of this study, four different decision making theories will be discussed: integrative process approach, directional processing theories of emotions and judgment, cognitive experiential self-theory, and appraisal theories.

Integrative Processes Approach

The integrative processes approach of decision making has been described by Roets and others when looking at the way multiple factors influence judgment and decision making. In their theory, they state that there are four process variables in decision making: arousal, cognitive ability, motivation, and affect (Roets et al 2011).

First, arousal can be viewed as the alertness to respond to stimuli, both internally and externally. Moreover, when making decisions, Roets et. al specifically call upon the Yerkes-Dodson Law. According to them, this law specifies the need for moderate levels of arousal to result in optimal performance because levels that are too low or too high will damage performance (Roets et al 2011). In other words, there must be a balance between high and low

arousal in order to have the best cognitive abilities. When there is too much or too little arousal, cognitive abilities like decision making and reasoning could be impaired.

Secondly, in terms of cognitive ability, there are several things that take place that also can impact performance of decision making and reasoning. For instance, Roets and others discuss how stressors can influence these cognitive abilities and therefore increase errors in decision-making strategies. Some of these factors include time, pressure, noise, and natural life-event stressors (Roets et al 2011).

Additionally, they also discuss how motivation is necessary for decision-making processes; more specifically, the need for closure in making decisions. The need for closure (NFC) is described as the urge to find an answer for a topic that eliminates confusion and ambiguity (Roets et al 2011). The essence of their argument is that NFC is the psychological motivation to have a decision- no matter the costs- in order to soothe any uncertainty.

Finally, the fourth part of their model is affect, or the experiences of emotions, feelings, and moods. Emotional state is another aspect of psychological factors that can impact the way people receive information and interpret judgments. In terms of affect, the combination of a negative affect and arousal can be combined with stressors to influence decision making overall (Roets et al 2011).

The combination of these four components within the integrative processes approach proposes that there is an overlapping combination of these four processes that influences and intertwines with one another to impact information gathering and processing (Roets et al 2011). The gathering and processing of information is what ultimately impacts decision making and judgment, according to the integrative process approach. Specifically for juror decision making, these four factors are hypothesized to work together within and outside the courtroom as both

situational and dispositional input. This type of input can then create an impact on the way jurors approach the information they are given and make judgements. Thus, when a juror is making a decision about sentencing, they will base their decisions subconsciously on level of arousal, their cognitive abilities, motivation to make a decision, and emotional state.

Directional Processing Theories of Emotions and Judgment

A simpler way to look at emotions and decision making is through the directional processing theories of emotions and judgment. After the directional processing theory was proposed by Feigenson and Park (2006), Nuñez and others applied this theory to emotions felt in the courtroom. One element very common in this theory is mood congruency effects, which is the phenomenon where people tend to call upon memories that match their current mood. In simpler terms, when trying to remember an event that happened when you were feeling sad, it is easier to remember this event when you are feeling sad again. Their theory takes the idea of mood congruency effects, and states that emotions can call upon the information that aligns with a specific emotion in decision making. Thus, if a juror is feeling sad when hearing a sad testimony, they will likely recall this information again when feeling sad in the decision making process. This phenomenon indicates to us how humans match emotional information with emotional states.

More specifically, Nuñez and others suggest that mood congruency effects may utilize emotions to cue the decision maker to look at specific pieces of information that are consistent with that emotion (2015). In other words, affective processing can cause someone to look only at the information that aligns with the emotions and moods they are experiencing. For example, if a person is identifying with sadness, they are more likely to look into the information that will be

consistent with their feelings of sadness. This theory suggests that decisions will come from the consistency of emotions in terms of information presented and cause decision makers to be influenced by their emotions. Therefore, for the juror who felt sad after hearing a sad testimony, they will both remember that feeling of sadness later on, and also most likely search for evidence that aligns with their feelings of sadness. This can be problematic because they will rely only on information that aligns with their feelings of sadness and their memory of a sad testimony rather than taking all evidence into account. The use of overly sad evidence can thus create a decision based on emotion rather than logic.

Cognitive Experiential Self-Theory (CEST)

Another theory of how emotions can be applied to juror decision making is the cognitive experiential self-theory or CEST. This theory was originally developed by Epstein and others in 1996, but has been continuously utilized and cited in other works. To break down this approach, it states that there are two routes of information processing: rational and experiential processing routes of persuasion (Edwards 2022). More specifically, these two routes are theorized to help determine decision making and the processes that occur when doing so.

For example, the rational route is defined by intentional and analytic thoughts, which are affect or emotion free (Edwards 2022). In other words, the rational route is more thoughtful and effortful in terms of how decisions are made. These processes are based more on logic rather than emotions and mood.

On the other hand, the experiential route is defined by automatic, associative, preconscious, holistic thoughts that are based on life experience and emotions (Edwards 2022). To rephrase this, the experiential route is more innate and subconsciously determined by the

emotions and moods that are occurring within a person. There is less of an emphasis on logic here, and more focus on individual internal experiences.

When examining the two routes together, people's preferences towards one route over the other may differ based on their natural inclinations (Edwards 2022). However, it is typically thought that the experiential route is more of the default for processing since it is automatic and does not require effortful use (Edwards 2022). Jurors may thus base their decisions on whichever route they tend to use to process information. For example, a juror who tends to favor the rational route will examine all evidence and information they receive very thoughtfully and decide based on logical reasoning. Such a juror is less likely to rely on mood to make a decision and tend to leave emotions out of their decision making process. Meanwhile, a juror who tends to favor the experiential route will take a more holistic approach to making a decision. Specifically, this juror will rely on their emotion and the moods of those around them in the courtroom. The experience they have within the courtroom will often influence a decision they make, since the experiential is based on life experiences. Altogether, while there can be jurors who simultaneously use both routes to make a decision, it is more often that the experiential route is used due to its automatic processing, which can be problematic to courtroom decisions. Overall, this theory plays a large role in the literature around courtroom decision making, and for this reason will be applied later on to understand how jurors process emotions.

Appraisal Theories

The final approach to emotions and decision making is one that will be a large basis for this study's research on emotional states and juror decision making. Appraisal theories make distinctions between the effortful processing and search for information when feeling emotions

of sadness, and the certainty of decisions when feeling emotions of anger. The two realms of certainty and uncertainty of information are what cause decision making to be influenced by emotion. According to this hypothesis, the emotion of sadness will cause, in this case jurors, to feel uncertain and search for more necessary effortfully-processed information. Whereas, the emotion of anger will cause feelings of certainty and heuristic information processing. Thus, emotions of sadness and anger have differing effects on juror information processing.

Another way to think of this theory is through arousal and affect. As described by Nuñez and others, appraisal theories support the idea that decisions may be affected by emotions because emotions, such as anger and sadness, can influence the depth of information processing (2015). According to this theory, anger results in greater certainty and shallow processing, whereas fear and sadness result in less certainty and deeper processing. The essence of their argument is that appraisal theories are based on the fact that emotions change the processing of information once a person experiences a state of activation. In particular, anger creates more surface level and less in-depth processing, while sadness generates more processing to find more information. Thus, certainty is a result of emotions, and prompts the search for more information. Therefore, if a juror is feeling more anger, they will make quicker, less thought through decisions. On the other hand, if a juror is feeling more sadness, they will take longer to make a decision and think through all of the information presented. Overall, this framework has been cited and discussed in relation to juror decision making, and is essential to understanding the distinctions between different emotions and their effects within the courtroom.

Judgment and Decision Making in the Courtroom

Environment of the Courtroom

Through the interplay between emotions and decision making, the necessary judgments in a courtroom setting are subject to outside influences. Many studies have shown that within and outside the courtroom setting, the decision making from emotions can alter the environment created in a court. To elaborate, the specific decision-making environment of a courtroom consists of persuasion, narratives, and emotions. However, it is important to keep in mind how these are used to create such an environment for decision making. For example, heuristic persuasion is a method used frequently in the courtroom by the defense and prosecution to aid in decision making for jurors (Simon 2019). Some of the devices used include emotional appeals, metaphors, irony, rhetorical questions, humor, and likeability of the speaker (Simon 2019). All of these methods of persuasion contribute to a bias-filled environment in the courtroom (Engel & Glöckner 2013).

Specifically, in terms of emotional appeals, narratives are used as a way to persuade or alter the way a decision is made. Simon states that the way a story is told has the power to change the recipient's base emotion, and cognitive reactions, such as critical thinking, can be weakened (2019). In other words, by using an emotional appeal, such as descriptive stories of the crimes that have occurred, the listeners are less likely to analyze their decision and to think logically. They are more likely to jump to a decision and have more certainty of the crime committed, even if there is more emotional appeal than facts. Additionally, these appeals, once used, are difficult to remove from the juror's interpretation of the case (Engel & Glöckner 2013). In other words, once an emotional appeal is presented to the juror, they will keep that emotional interpretation and not be persuaded by anything other than that emotion. This phenomenon makes decisions biased and creates a biased courtroom environment.

When noting these emotional appeals to legal decision making, there is also an element of liking that influences judgments. As theorized by Engel and Glöckner, biases often result in a person being invested psychologically in a cause (2013). They describe how relevant bias is in causing role influence, such as the role of attorneys (Engel & Glöckner 2013). Through the use of tools, such as narratives, attorneys can create a sense of *liking* based on the emotions of a speaker and their listeners. This technique is especially used for witness testimonies, victims, and presentation of evidence. Within the emotional appeals of people in the court, jurors are more likely to favor groups they like and reject the positions of groups they dislike (Simon 2019). To put simply, they will base their decisions on the emotional appeal of those who they are persuaded to like versus those they are influenced to dislike. Judgments made in relation to impact statements, testimonies, and evidence can generate either positive or negative reactions towards a future decision. The more a juror is invested in a cause, especially one of a group they favor, the more likely they are to give a positive outcome for that group (Engel & Glöckner 2013). Conversely, the more negative the bias of an out-group of a juror, the more likely a negative outcome will occur for them. The tools used by attorneys such as heuristic persuasion, liking, emotional appeals, among others create this environment of judgment and decision making in the courtroom.

Emotional Processing of Jury Decisions

Because jurors are an essential part of the U.S. legal system, it is important to conceptualize how emotions play a role in the courtroom. Another aspect within the decision-making environment of the courtroom that is not as visible as heuristic persuasion is the

emotional processing that creates decisions and judgments. For instance, emotional processes are generally influenced by direct and indirect manipulations.

In particular, Edwards describes two different processors in our brain that are utilized to approach information and manipulate others: rational trait processors (R-processors) and experiential trait processors (E-processors) (2022). Both are at our disposal to use at any time; however, the way we interpret information is influenced by how much we use one versus the other at a given moment. As stated, E-processors are more influenced than R-processors by information outside of the trial testimony or evidence, such as extralegal information, and those using E-processors are more likely to give harsher sentences when presented with this information (Edwards 2022). The essence of their theory is that experiential processors will be more impacted by information that is utilized in heuristic persuasion and incidental factors. Thus, stronger use of E-processors versus rational thinking also will result in more emotional feelings towards sentencing and decision making. This effect then causes longer and more severe sentencing decisions.

Edwards also utilized CEST, which theorized the rational and experiential processing routes of persuasion. However, in describing his theory, Edwards hypothesized that emotional appeals will increase E-processing and impact the effects on a trial (2022). This type of processing can not only influence the trial, but also the experiences of the jurors in terms of the emotional impact of serving on a jury. Additionally, it is important to note that heuristic persuasion is talking more generally about emotional appeals, not a specific emotion of anger versus sadness, for example. However, there have been studies to distinguish between anger and sadness in the courtroom in order to solve this problem of them often being grouped together.

Appraisal Theories and the Court

As discussed, one of the many theories put in place to understand juror emotions is appraisal theories. As described by Estrada-Reynolds and others (2016), appraisal theories are able to suggest the way in which specific emotions are associated with a juror's feelings of certainty or uncertainty. More specifically, many psychologists believe anger is associated with feelings of certainty, while other emotions that elicit uncertainty force the desire to understand and obtain more information about a situation; they need more effortful processing (Estrada-Reynolds et. al 2016).

To understand this theory better, it is important to split the two emotions of sadness and anger in terms of certainty. For example, sadness is correlated with more effortful information processing that is detail oriented (Estrada-Reynolds et. al 2016). The essence of Estrada-Reynolds' argument is that when a person experiences emotions of sadness, they will take the information they are given and analyze it more closely because they have feelings of uncertainty (2016). Thus, to have sadness is to have unease in the search for certainty of information.

On the other hand, anger is correlated with less information processing and inability to pay attention to details (Estrada-Reynolds et. al 2016). Appraisal theory describes anger as being more heuristic and attention-narrowing when processing information, thus impacting a juror's ability to make decisions (Estrada-Reynolds et. al 2016). In other words, when a person experiences emotions of anger, it is theorized that they will not search for more information because they are more certain about their feelings. However, this can influence the way they make decisions because they do not feel the need to understand all of the information in front of them.

Thus, according to Estrada-Reynolds et. al, if we apply appraisal theory to the legal decision-making of a courtroom, it is theorized that a juror will feel more certain and process information heuristically, such as through superficial cues, when they feel more angry (2016). This is because they believe that the evidence received is all that is needed to make a decision and they are completely certain, so they stop processing or listening. On the other hand, if they feel more sad, they will feel as though they need to find more cues and find more information to help them make a decision, creating uncertainty (Estrada-Reynolds et. al 2016). In understanding appraisal theories, it is found that the emotions inside and outside of a courtroom can influence information processing. Certain emotions generate certain responses that can force jurors to have differing experiences within the court.

Events Prior to the Courtroom that Cause Emotionality

Jurors bring with them to the courtroom their internal emotions that can alter perceptions and experiences of a case. These emotions can be from events prior to the case (i.e. personal lives, mental status, personality, etc.) that cause them to feel more deeply from the start. This effect can force the jurors to have an extremely negative or positive experience from the start, rather than the neutral feelings that courts want them to have. Whether these emotions are good or bad, the events prior to entering the courtroom still have an impact on the jurors' emotions during the trial. Thus, the emotionally-charged events of the trial can amplify an already emotional jury.

To better conceptualize this notion, looking at the negative emotions of anger is important in understanding blame and punishment. For example, Ask and Pina specifically conducted their experiment on how anger of jurors can influence the way defendants are blamed for their

supposed crimes (2011). More specifically, they used a mock jury to understand how different emotions of sadness, anger, and a neutral state of jurors can increase punitiveness toward the defendant. Participants in their trial were placed in one of these three conditions and asked to read an assigned vignette about a social event as an emotion induction. The social event described would either be made to induce anger, sadness, or a neutral stance. The purpose of these vignettes was to create a similar effect to match how jurors often come into the courtroom with prior emotions. They then all read the same vignette that described an embezzlement case and were asked questions about the perpetrator's criminality. For instance, they were asked about their criminal intent, causal control, and punitiveness.

From their study they were able to find results to understand how emotions- and more specifically, anger- can be a motivator to place punishment on a defendant. To summarize, Ask and Pina found that anger is possibly the leading emotion to increase the perceptions of jurors on a defendant's criminality and therefore lead to harsher punishments (2011). Additionally, Ask and Pina found their study to be consistent with appraisal theories of emotion, arguing that anger caused certainty in their judgments towards the defendant. These results give the field insight into how angry jurors can be correlated with blame and perceptions of criminality within the courtroom.

Evidence Causing Emotionality

In addition to the incidental emotions outside of a courtroom, the integral emotionality within, such as evidence in a case, impacts the affect of jurors. Similar to the findings of pre-emotion induction, evidence given in a courtroom has the potential to impact one's emotionality once the trial has begun. Specifically, a theme has been theorized that the use of

emotion-inducing evidence can influence jurors and their sentencing decisions. This is a big concern as it impedes on what is supposed to be an unbiased decision-making process. For this reason, oftentimes biased evidence and its potential influence is excluded from the presentation of cases. Nonetheless, it is sometimes unavoidable that an essential piece of evidence will cause emotions amongst jurors and everyone else in the courtroom.

This type of emotion-based decision making has been studied in numerous cases utilizing mock juries. For example, in their study, Bright and Goodman-Delahunty were testing how particularly intense evidence can induce emotions of anger, which are attributed to blame and decision making (2006). As assumed in appraisal theories, anger is an emotion that is attributed to feelings of certainty and less information seeking. Thus, those that are angry can more easily place blame and punishment on perpetrators. How Bright and Goodman-Delahunty wanted to test this was different from previous studies that induced emotions before presenting evidence (2006). Instead, they used the evidence as a way to induce emotions. They did so by using photographs and verbal evidence that would be presented to a mock jury at different levels of severity of evidence. Their pilot study served to rank each of the pieces of evidence as being neutral or gruesome. These were then taken to the secondary study to the differing conditions of severity and verbal versus photographic evidence. What they found was that photographic evidence had more of an influence on sentencing, as well as the severity level (Bright & Goodman-Delahunty). These results can indicate how the use of emotional evidence in the courtroom can induce certain emotions, specifically anger as a result. Angry emotions due to gruesome evidence creates a sense of certainty of blame and sentencing decisions.

Results similar to Bright and Goodman-Delahunty were found in Alexander's study on the effects of victim impact statements (VIS) on sentencing decisions (2018). More specifically, this

study used VIS, which are some form of statement from one of the victims of the crime that described the emotional, physical, and/or financial impact they or their loved ones have suffered as a result of the crime. In Alexander's study, they also induced emotions using evidence from VIS to predict the levels of confidence in verdicts, and measured anger levels (2018). From this, they found trends in anger predicting high levels of confidence in decisions (Alexander 2018). In other words, their results described a positive relationship between feelings of confidence and anger. From this, we can understand that with confidence comes certainty in a decision and a second support of appraisal theories. As predicted by appraisal theories, the more anger that is felt, the more confidence and certainty in a juror's decision. The use of VIS then can be tied to the emotions of anger and thus decision certainty. From this, emotionality in the courtroom can be attributed to evidence presented to the jury.

Emotionality Influencing Sentencing Decisions

The emotionality of jurors, both incidental and integral, has the potential to influence sentencing decisions. Emotionality in this case can mean from both events prior to sentencing and the evidence presented. As discussed, emotions have the power to impact the decisions of jurors and thus the sentencing process of a jury. Some may say that the power of emotions does not apply when guilt has already been determined or admitted. Thus, there is no decision for emotions to influence. However, this argument disregards an important court process in the court to a trial: sentencing. The sentencing and its length are a secondary aspect to decision making within the courtroom that can be influenced by the emotions of a jury. Specifically, when emotions are used in the assignment of criminal responsibility, there is likely a harsher sentence brought out by those emotions.

For example, when discussing the Menendez brothers case brought up before, although they did not plead guilty, they did admit to killing their parents. However, the argument made in court was that they acted in self-defense against their parental abuse. Thus, in their trial, their defense used a lot of emotional appeals towards the jury, such as pictures, VIS, and witnesses of the abuse. Additionally, the prosecution similarly used many emotion-inducing photos and statements from family members and friends. There were two different emotions at play, however, in their trial: sadness and anger. For the defense, their evidence and incidental influences induced more sadness that, according to appraisal theory, would cause more uncertainty. Meanwhile, the prosecution tapped into the anger of the jurors, which would lead to more certainty in punishment. Between the two, anger overpowered and led to their life sentence without parole.

As pointed out by many real life examples of sentencing decisions, there are two processes of decision making in the courtroom: guilt and responsibility. Guilt in this sense is much more black and white as *guilty* or *not guilty*, despite the emotions that may influence this decision. However, there is the added dimension of responsibility that is more complicated when discussing the sentencing phase of a trial. How responsible a person is for a crime can depend on a lot of things: their mental and psychological state, whether or not they were pressured, the events leading up to the crime, and more. Thus, although responsibility determines a sentence, the emotions of how the case is presented can influence it as well. Kunst and others point out that the risk of an incorrect decision about guilt is higher when jurors are uncertain about involvement in crime (2020). Therefore, the risk of harsher sentencing is higher when uncertain about blame. The essence of their argument is that certainty plays an important role in both guilt and sentencing. As discussed in appraisal theories, a lack of certainty comes from the feeling of

sad emotions, while certainty is aligned with anger. Thus, there is a link here between the sadness felt during a trial with uncertainty. The difference between their study's results and others is that it is usually anger that is theorized to lead to harsher punishments. However, this suggests that there is a continued need to reexamine the theories put in place that separate sadness and anger in a setting that can induce both. As pointed out by Nuñez and others, between the two phases of a trial (guilt and sentencing), emotions are less often examined in terms of the juror's sentencing decisions and assigning responsibility (2015). This supports the argument that although there can be certainty in the decision of guilt, actual responsibility, blame, and dangerousness are left up to interpretation when it comes time for a sentencing decision and the emotions that have been presented.

Despite the application of appraisal theories in many settings, there is new research suggesting that there is not as much difference between sadness and anger in the courtroom as we think. In this same article published by Nuñez and others, they tested appraisal theory using mock jurors and emotion-inducing evidence (2015). During their study, they gave these mock jurors two different levels of evidence to demonstrate differences of weak versus strong mitigating evidence. Although they did not directly influence a specific emotion with their evidence variable, they asked participants if they were feeling sadness, anger, or fear after watching the video of the capital trial. This was able to assign them to groups based on the emotions they felt after receiving the evidence. They then asked participants to give a sentencing based on the evidence presented. What they found was that their study did induce emotions of anger and sadness according to their reports. However, there was little support for appraisal theories. In other words, while those who felt anger and sadness did have those emotions during the trial, they did not impact sentencing decisions. In other words, while they were emotional,

the distinct anger emotion did not create harsher sentences than the sadness emotion. The overlap between anger and sadness is large within the courtroom and difficult to distinguish. Because of these problems with juror emotions, there is a need to reexamine how we interpret appraisal theories in order to understand the environment of important decisions.

Present Study

Based on the literature and previous studies of juror emotions and decision making, I conducted research on the processes of emotionality within jurors and their eventual sentencing. Two of the motivating studies to my research were Esnard and Vibert (2021) and the many works done by Nuñez (2015, 2016). Esnard's report provided a start for the large amount of research on juror emotional states and how there are extralegal factors that influence juror decision making. More specifically, while their research centered on the attention focus of jurors, I found their interest in emotions to be something that could be further tested. Upon conducting literature reviews, it was found that there are many hypotheses around the impacts of emotions on juror decision making. However, the theory that stood out as a common trend was appraisal theories. For this reason, I decided to test appraisal theory in its effectiveness in application to sentencing for a mock pre-deliberation jury. Additionally, a second element that was a common trend in analyzing the literature of jury decisions was the use of VIS. Specifically, Nadler and Rose (2003) found results that VIS can influence reasons for sentencing. For instance, their evidence suggests that VIS correlate with negative affect and leads to higher likelihood of searching for reasons to blame and punish (Nadler & Rose 2003). In other words, the VIS they created were able to influence the decisions of mock jurors. Thus, I decided to utilize their supported VIS in my study as well. As many of the studies within this field have done, I created a mock

pre-deliberation jury in which I would induce emotions, using supported movie clips and VIS, and therefore understand the emotional processing behind their decisions. Previous work has already demonstrated that emotions in general and VIS impact juror decision making. However, these studies have not combined the use of pre-emotion induction and a secondary emotion induction to mirror a courtroom and test appraisal theories. Thus, my research aimed to imitate the way emotions can occur before entering a courtroom and once jurors are inside and presented with evidence.

Methods

Participants

This survey recruited 184 participants through the CloudResearch platform (Hartman et al. 2023), which is a secure online service where individuals can sign up to complete surveys and other online tasks for small sums of money. Participants were compensated \$2 for completing the survey and all were at least 18 years of age. Out of the 184 participants that completed the survey, I excluded any participants who failed the attention check ($n=5$) and any participants who started, but did not finish the survey and had a progress level of less than 96% ($n=3$). This resulted in 176 participants for analysis.

The final sample ranged in age from 18 to 69 years ($M=39.10$, $SD=11.96$, $Med=37$) and included 99 (56.25%) males and 77 (43.75%) females. Finally, when looking at the participants' education level, 15 (8.52%) have a high school diploma or equivalent, 39 (21.16%) received some college credit, but no degree, 6 (3.41%) went to a trade/technical/vocational school, 22 (12.50%) have their associate degree, 68 (38.64%) have their bachelor's degree, 18 (10.23%)

have their master's degree, 3 (1.70%) have a professional degree, 5 (2.84%) have a doctorate degree.

Materials

In order to assess how emotions can influence jury decision making, a questionnaire was created based on previous research and using resources from other studies. More specifically, the two emotion inductions were taken from two different research studies that were found to have some significance in influencing emotions and/or decision making processes. These inductions, as well as additional assessments were utilized in the creation of the final survey. All materials and questions are listed in the appendix section.

Video Induction

These clips were found from a previous study database by Schaefer et al. 2010 aimed to prime various emotions. For the anger prime, participants watched a clip from *In the Name of the Father* (00:03:31), for sadness prime, they watched a clip from *Dead Poets Society* (00:04:25), and as a neutral prime, they watched a clip from *The Lover* (00:00:44). All of these videos were linked to the assigned emotions based on the Schaefer et al. 2010 study.

Vignette Induction

These vignettes were obtained from Nadler and Rose's 2003 study on VIS and their influence on decision making. The two vignettes varied on severity of details accounted for by the victim and were shown in Nadler and Rose (2003) to have influence on the decisions made in

terms of length of sentencing for the perpetrator. My study similarly asked for decisions based on the trial in these vignettes to be made in the form of sentencing length.

Additional Assessments

In addition to the emotion inductions, there were several other factors examined. One of the materials incorporated as both a pre and post-emotion check was an emotion rating that included four options: happy, sad, angry, and neutral. Furthermore, an attention check was used asking participants to select “strongly agree” if they are paying attention, in order to account for participants selecting random answers. Finally, a few demographic questions were included such as age, gender, and education level.

Procedures

Participants completed a questionnaire that was aimed to assess the way in which induced emotions before and during a trial may influence a juror's decision making. Both the video induction and vignette induction were presented to participants within the context of the survey and required to watch and read. Before being given an emotion-induction, it was important to assess the participants' pre-emotions. Participants first completed a pretest of their current emotional state, then all participants were randomly assigned to a priming emotion of either anger ($N=56$), sadness ($N=60$), or neutral stimulus ($N=60$). To prime participants, they were randomly assigned to one of three emotion-inducing video conditions (anger, sadness, control). They were required to watch one of the three emotionally-charged videos in order to move on to the next part of the survey. After doing so, participants received a post-test, parallel to the pre-emotion assessment, intended to assess whether our priming stimulus worked. Additionally,

included was an attention check to make sure that participants are fully paying attention to the survey. After this, participants were also then randomly assigned to a vignette of a third degree burglary case with two different severity ratings: severe emotional injury and a control. Next, participants were asked to give a sentencing rating on a scale from no jail time/probation to 5 years in prison, which was the only required question. This was required, since it is the most essential question to our research and is needed in order to check the effects of our priming. Finally, participants were asked questions on age, gender, and education level.

Results

This study aimed to analyze the relationship between emotion and decision making in a legal context. Specifically, it was predicted that induced emotions both before and after entering a courtroom-setting would influence sentencing decisions. Thus, it is hypothesized that the type of emotion induction (anger, sadness, or a control) and level of severity (control or severe) in a burglary case will impact sentencing length decisions. Based on appraisal theories and other studies presented, it is also hypothesized that those induced to feel anger and who receive a severe burglary case will result in longer sentencing decisions than those who are induced to feel other emotions or a control. As described below, results indicated that the video induction did not have a significant impact on sentencing length. However, the severity of the vignette did significantly influence the length of sentencing for participants.

Emotion Check

It was hypothesized that participants would not report a relationship between the pre-emotion check and video inductions (see Table 1). A chi square test of independence was run

to test whether there was a relationship between the participants' reported pre-emotion and the video condition they viewed after. It was found that there is no significant relationship between the video condition and the participants' emotions before viewing the video, $\chi^2(6, N=176)=5.45$, $p=0.49$. Therefore, participants went into the video condition without a relationship with their prior emotions. Table 1 suggests that most emotions reported are neutral or happy, with few differences between the three video groups.

It was also predicted that after viewing an emotional video, participants would report emotions that align with the emotion of the video (see Table 2). A chi square test of independence was run to test whether there were differences between the participants' reported emotion in the pre- and post-emotion check. It was found that there is a significant difference between participants' reported emotions both before and after viewing the video induction, $\chi^2(9, N=176)=28.83$, $p<0.001$. It can be concluded that there is a significant change between the emotions reported before and after viewing the video, indicating the video had an impact on changing emotions. Table 2 shows that reported emotions changed after watching the videos in the predicted direction; control video participants reported feeling neutral, sad video participants reported feeling sad, and anger video participants reported feeling both sad and angry. Despite variation in the anger video group, there was still a significant change from Table 1 to Table 2.

Table 1: Pre-emotions reported before watching the video inductions.

Reported Emotion	Video Condition		
	Control (N=60)	Sad (N=60)	Anger (N=56)
Happy (N=67)	33%	43%	38%
Neutral (N=104)	63%	52%	63%
Sad (N=4)	3%	3%	0%
Anger (N=1)	0%	2%	0%

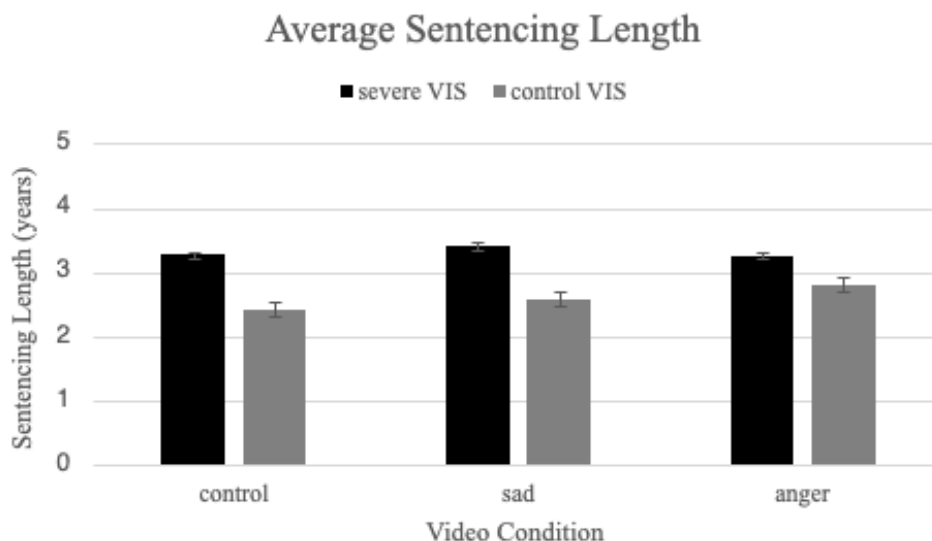
Table 2: Post-emotions reported after watching the video inductions.

Reported Emotion	Video Condition		
	Control (N=60)	Sad (N=60)	Anger (N=56)
Happy (N=16)	18%	3%	5%
Neutral (N=85)	80%	20%	45%
Sad (N=63)	2%	77%	29%
Anger (N=12)	0%	0%	21%

Sentencing Decisions

Between Conditions It was predicted that participants assigned to the anger video and severely emotional vignette would give the longest sentencing lengths compared to all other groups. A two-by-three analysis of variance tested whether the sentencing lengths differed between both the video and vignette conditions. It was found that there is no significant difference between sentencing lengths among participants assigned to the six different conditions $F(2, 170)=0.13, p=0.88$. Therefore, sentencing lengths were not longer based on the combined conditions of emotion-inducing video and vignette. The average sentencing lengths for the six conditions are shown in Figure 1 below.

Figure 1: Average sentencing lengths among video and vignette conditions



Vignette Condition It was predicted that participants assigned to the severely emotional vignette would give a longer sentencing length than those assigned to the control vignette. A two-by-three analysis of variance tested whether the sentencing lengths differed between the vignette groups based on emotional severity. It was found that there was a significant difference

between sentencing lengths for participants who read the severe vignette and those who read the control vignette, $F(1, 170)=11.06, p=0.001$. Thus, participants assigned to read the severely emotional vignette ($M=3.34, SD=1.48$) gave longer sentencing lengths than participants assigned to read the control vignette ($M=2.56, SD=1.48$). This suggests that participants sentenced the perpetrator in the severe vignette more intensely than the control vignette, highlighting the impact of victim impact severity on participants' responses.

Video Condition Finally, it was also hypothesized that participants assigned to the anger condition would give the longest sentencing length, followed by the sad condition, and finally the neutral condition. A two-by-three analysis of variance tested whether the sentencing lengths differed between the emotion-inducing video groups. It was found that there is no significant difference between sentencing lengths for participants who viewed the anger, sad, or neutral videos, $F(2, 170)=0.24, p=0.79$. Therefore, longer sentencing lengths were not based on whether they were assigned the anger video ($M=3.04, SD=1.52$), sad video ($M=3.05, SD=1.55$), or neutral video ($M=2.78, SD=1.51$). These results suggest that the type of video (sad, anger, or neutral) did not significantly affect participants' ratings.

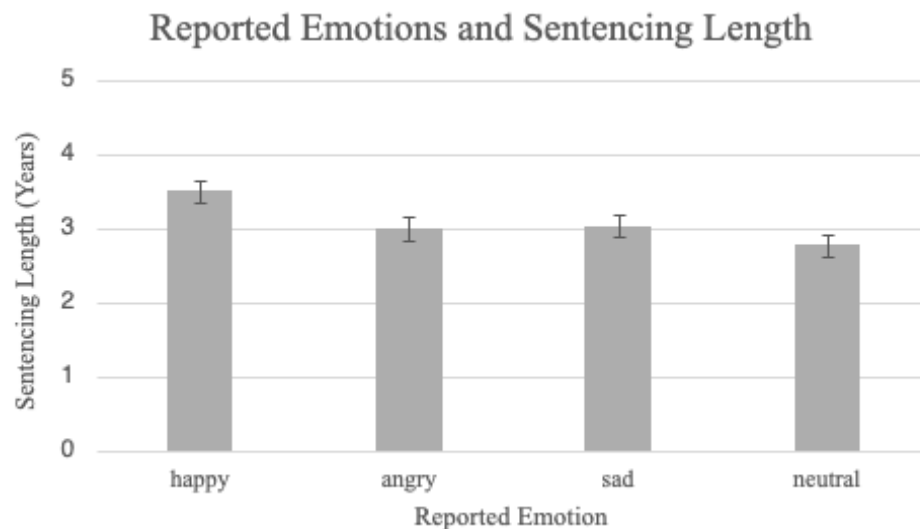
For the video conditions, it was also hypothesized that participants assigned to an emotion of either sadness or anger conditions would give longer sentencing lengths than the control. A one-way analysis of variance was run again to test whether the sentencing lengths differed for the emotion videos versus the control group. It was found that there is no significant difference between sentencing lengths for participants who viewed the anger or sad and the neutral videos, $F(1, 172)=0.49, p=0.48$. Thus, participants assigned to an emotion-inducing video ($M=3.04, SD=1.53$) did not give longer sentencing lengths than those assigned to watch a neutral

video ($M=2.78$, $SD=1.53$). This continues to suggest that the emotional videos themselves did not significantly impact the participants' sentencing decisions compared to the control video.

Impact of Reported Emotion

It was hypothesized that participants who reported feeling more intense emotions, such as sadness and anger, would give longer sentencing lengths compared to less intense emotions, such as happiness and neutrality (see Figure 2). A one-way analysis of variance tested whether the sentencing lengths differed between the different reported emotions of happiness, sadness, anger, and neutrality after viewing the video induction. It was found that there is no significant difference between sentencing lengths for participants who rated their emotions differently $F(3, 172)=1.16$, $p=0.33$. Thus, sentencing lengths were not longer based on the participants' post-video emotions of happiness ($M=3.51$, $SD=1.59$), anger ($M=3.01$, $SD=1.54$), sadness ($M=3.04$, $SD=1.55$), and neutrality ($M=2.78$, $SD=1.48$). These findings imply that factors other than emotional state likely influenced the sentencing decisions more substantially, and the emotional responses of participants may not have played a major role in shaping their judgments. However, it is important to note that participants who reported feeling happy ($N=16$) and angry ($N=12$) had fairly small sample sizes, which could have impacted their means.

Figure 2: Average sentencing lengths based on the reported emotions after watching video stimulus.



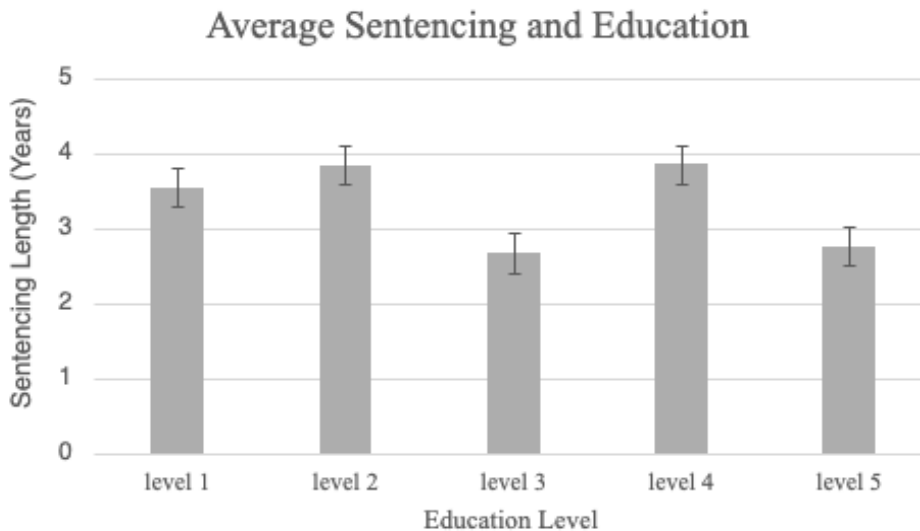
Education and Sentencing

Based on the demographic questions, it was predicted that participants would differ in sentencing lengths based on their levels of education (see Figure 3). A one-way analysis of variance tested whether sentencing lengths differed between the different groups of education level (high school graduate, some college credit, trade/technical/vocational training, associate's degree, bachelor's degree, master's degree, professional degree, doctorate degree). It was found that there was a significant difference between sentencing lengths across the different levels of education $F(7, 168)=3.72, p<0.001$. Therefore, participants differed in sentencing lengths based on their levels of education.

Additionally, a secondary one-way analysis of variance tested whether sentencing lengths differed between lower levels of education (level 1=high school graduate; level 2=some college credit and trade/technical/vocational training; level 3=an undergraduate degree; level 4=graduate degree; level 5=professional or doctorate degree). It was once again found that there is a

significant difference across these groups of education levels in sentencing lengths, $F(4, 141)=3.65, p<0.01$. Notably, participants with higher education levels generally gave lower average sentences, with the exception of level 2 and 4. The average sentencing lengths for the eight education levels are shown in Figure 3 below.

Figure 3: Average sentencing lengths among the levels of education reported by participants.



Additional Demographics and Sentencing

Gender An additional assessment was conducted to test whether participants differ in sentencing lengths based on gender identity. A one-way analysis of variance tested whether sentencing lengths differed between male and female participants. It was found that there is no significant difference between sentencing lengths for male and female participants, $F(1, 174)=1.55, p=0.21$. Thus, sentencing lengths were not longer based on the participants' gender identity of male ($M=2.82, SD=1.59$) or female ($M=3.11, SD=1.43$). Therefore, demographic factors of gender did not play a role in shaping participants' decisions in a pre-deliberation jury-setting.

Age The demographic portion of the questionnaire also collected the ages of participants in order to test whether participants differ in sentencing lengths based on their age (see Figure 4). A one-way analysis of variance tested whether sentencing length differed overall between participants of different ages. It was found that there is no significant difference between participants' ages, $F(47, 127)=0.90$ $p=0.66$. Thus, age also did not affect participants' sentencing lengths in the decision making process.

Figure 4: Average sentencing lengths among the various ages of participants.



Discussion

The findings of this study provide valuable insights into the factors that influence juror decision making, both before entering the courtroom and when receiving compelling evidence. The study aimed to explore how induced emotions, both prior to and after entering a courtroom setting, would influence sentencing decisions. However, contrary to the initial hypothesis that both the type of emotion induction (anger, sadness, or a control) and level of severity (control or severe) in a burglary case will impact sentencing length decisions, the results suggest that emotions induced by video stimuli did not play a substantial role in shaping participants'

sentencing decisions. To put simply, it appears that mock pre-deliberation jurors were able to distinguish between their emotions outside of the case and the severity of the victim impact statement they received. This is contrary to literature presented on the video conditions, as well as the influence of incidental factors on decision making. Thus, these findings can point to the limitations of applying decision making hypotheses, such as appraisal theories. This impact demonstrates the need for further research into the complex interaction between emotion and reason in juror decision-making, especially in real-world scenarios where emotions may play a more significant role due to external pressures or personal experiences.

Implications

Based on the results, it is clear that emotions were induced into the jury. While the emotional induction was successful in eliciting an emotional change, as shown by the significant difference between pre- and post-video emotion checks, it did not lead to significant differences in sentencing length across the emotion groups. In other words, participants who reported feeling happiness, anger, sadness, or neutrality did not show statistically significant differences in the sentences they imposed. This implies that incidental emotions, at least in the form of video-induced emotional states, may not be as impactful on sentencing decisions as initially expected. However, it is possible that emotions felt during jury decision-making may be more complex than the discrete emotional states induced by the videos. In other words, emotions such as anger or sadness might not be influential enough on their own to alter sentencing decisions in a meaningful way, especially when considered apart from other factors such as the severity of the crime or the defendant's characteristics. For example, the anger video often created both emotions of sadness and anger for jurors, demonstrating the complexity and difficulty in labeling

this emotion specifically. This effect can be compared to the complexity of the experience of jurors in a courtroom (Caviness 2021). Additionally, this result can imply the ineffectiveness of appraisal theories, which state that anger would result in harsher punishments than sadness (Nuñez 2015). In this case, neither played an influential part in decision making and illustrate the need to reconsider how emotional states are conceptualized in juror decision-making. For example, incidental emotions, such as those induced by videos, are not directly related to the decision at hand or the participants' lives. The lack of significant findings may suggest that incidental emotions, while present and measurable, do not have the same influence on juror behavior as integral emotions that emerge from the courtroom environment itself. This distinction supports the idea that emotional responses that are contextually relevant may be more likely to impact decision-making processes. While emotions are often thought to play a prominent role in influencing judgments, this study suggests that incidental emotions may not be a dominant factor in shaping sentencing outcomes when compared to other variables such as the severity of the crime and how evidence is presented.

In contrast to the findings on emotion, the severity of the crime, as represented by the vignette condition, had a clear and significant impact on sentencing length. This finding suggests that the perceived severity of the crime plays a more direct and tangible role in sentencing decisions. These results can imply the idea that jury decisions are not only driven by emotional responses but also by more rational evaluations of the crime. Additionally, it is important to note that the differences between the vignettes comes down to their phrasing being more objective or subjective to emotions. An objective, neutral vignette will solely present evidence and give room for only rational routes of processing. Whereas, a subjective, severely emotional vignette will influence both a rational and emotional processing route. In other words, it appears that jurors in

this study were using both their experiential and rational routes of processing, as aligned with the CEST theory (Edwards 2022). For example, when reading the different vignettes, participants were likely processing both the evidence presented in the readings, as well as the possible emotions presented. These results can indicate the dual processing of rational and emotional information when in the courtroom (Edwards 2022).

The lack of interaction effects between the video and vignette conditions further highlights the independent influence of case severity on sentencing decisions. Although the video successfully induced an emotional change in participants, this emotional shift did not appear to alter how participants viewed the severity of the crime or their sentencing decisions. This finding suggests that case-related factors, such as crime severity, may take precedence over the emotional context provided by video induction, emphasizing the rational aspects of juror judgment (Nadler and Rose 2003). This result has important implications for understanding how jurors might weigh different types of information when making decisions about punishment.

The results of this study also suggest that education level plays a significant role in shaping sentencing decisions, while other demographic factors, such as gender and age, do not appear to influence participants' sentencing judgments. These findings have important implications for understanding how various societal factors, particularly education, can impact judicial decision-making, especially in a jury or deliberative context. The significant differences in sentencing lengths across various education levels highlight that individuals with higher levels of education tend to issue shorter sentences. This suggests that education may influence the way jurors make decisions, perhaps leading them to consider mitigating factors or adopt a more lenient stance in sentencing. However, the lack of influence from gender and age is particularly noteworthy because it suggests that, in this particular sample and context, demographic factors

other than education may not be as critical in shaping sentencing outcomes. However, it is important to note that these findings are limited to the context of pre-deliberation jury settings, and future research could investigate whether these factors become more salient during deliberations, when jurors may have more time to process and discuss their perspectives.

Limitations and Further Directions

While this study provides valuable insights into the role of emotional induction in legal decision-making, several limitations must be considered based on its findings. First, the study was conducted online, which may have impacted participants' engagement or the authenticity of their emotional responses. Online settings often introduce variability in how participants interact with the material, which may not fully reflect the dynamics of in-person or courtroom settings. It may be helpful for future studies to have this be conducted in an in-person setting, where emotions can be more thought through. Additionally, although the video inductions and vignettes were modeled after those used in previous studies, these materials were specifically designed for a mock-jury, or in this case a mock pre-deliberation jury setting. While this approach provides valuable insights, it also may not accurately represent real-world scenarios where jurors are exposed to live testimonies, nuanced emotional cues, and the complexities of a courtroom environment. As such, the findings may not fully capture the intricacies of emotional responses in actual legal contexts. Future research should replicate these findings in more applicable, in-person settings, such as live mock trial simulations. This would allow for more authentic emotional responses and the observation of nonverbal cues and group dynamics. Using live actors or real courtroom footage could further enhance realism and better reflect the emotional and cognitive demands of actual juror experiences.

Additionally, individual differences in emotional regulation and sensitivity were not directly examined in this study. Some may suggest that these factors may moderate how individuals respond to emotional inductions, meaning the impact of emotional stimuli on legal decisions could vary between participants. Future research that takes individual differences into account may offer more nuanced insights into how emotions influence legal judgments across different personality types and emotional profiles.

Finally, another limitation is the small sample size used in this research. The relatively limited number of participants may reduce the generalizability of the findings. Future studies with larger, more diverse samples are necessary to ensure the results can be confidently extended to broader populations. Moreover in terms of diversity, the study focused on basic emotional responses without delving into more complex emotional constructs such as empathy, guilt, or shame. These emotions may play significant roles in moral and legal decision-making and could provide a deeper understanding of how emotional reactions influence judgments in legal contexts. Future research could explore more complex emotional constructs, such as empathy or moral emotions like guilt or shame, to better understand how emotional responses might influence decisions in legal contexts. Finally, future research should also more thoroughly investigate how demographic variables such as race, political views, and income level influence emotional responses and legal decision-making. These factors can shape individuals' perspectives, biases, and emotional reactions in courtroom scenarios, potentially impacting verdict outcomes. Including a more demographically diverse and representative sample would allow for a deeper analysis of how socio-cultural background interacts with emotional processing in legal contexts.

Conclusion

Emotions are constantly presented in the courtroom, both as extralegal factors and methods of persuasion when presenting evidence. While the literature around juror emotions and sentencing decisions points to anger as being the key emotion in influencing punitiveness, this study points to the possibility of more complex emotions. The results of this study demonstrated that jurors were more likely to be influenced by emotionality of victim impact statements than the emotions they had prior to entering the courtroom. Thus, jurors in this study were more often using rational routes to information processing, rather than being persuaded by their emotions. However, when reading impact statements, they analyzed the emotional impact of the crime to generate a sentencing decision, indicating more empathy when looking at evidence. Therefore, it can be concluded that while emotions are present in the courtroom, there is still rational processing occurring that is essential to making decisions. Additionally, there is a possibility that more complex emotions are occurring than accounted for that need to be analyzed more in the future. Like in the Menendez trial, emotions are constantly being used to appeal to jurors, whether impactful or not, and should be investigated further.

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Appendix A**Juror Emotions on Sentencing Decisions****Consent Form****1. SUMMARY and KEY INFORMATION**

You are invited to participate in a research study about juror decision making. Your participation is voluntary. You were selected as a possible participant because you are 18 years old or older and volunteered. The purpose of this study is to assess how jurors make decisions on sentencing. The research will last no more than 15 minutes. As part of the study, you will answer multiple choice questions about your feelings and opinions before and after watching a sensitive and emotionally-charged film clip and reading about a made-up court case. You will then be asked one required question, which is to give a sentencing length for the given crime. You may experience some discomfort because you will be answering questions regarding crime and their severity, as well as watching emotionally-charged film clips that may be sensitive and disturbing. This research, however, does not involve any risks greater than you might experience in their everyday life while reading, hearing, or talking about crime in your everyday life. The benefits of participation are \$2 compensation for filling out a brief survey and further knowledge about juror decision making. The study is being conducted by Bella Landino, an undergraduate Psychology student at Drew University and her faculty sponsor Professor Patrick Dolan. We ask that you read this document and ask any questions you may have before agreeing to be in the study.

2. BACKGROUND

The purpose of this study is to assess people's opinions on sentencing lengths and how they make their decisions, despite the emotionality of a courtroom. Current research has pointed to

emotions having an influence on courtroom decisions and the process people use to assess sentencing. Thus, we aim to examine the emotionality of a court case and its subsequent impact on decision making.

3. DURATION

The length of time you will be involved with this study is 15 minutes.

4. PROCEDURES

If you agree to be in this study, we will ask you to do the following things: Answer some general questions about your current emotions. Then, you will watch a sensitive and possibly disturbing film clip and be asked your feelings after viewing. We will also ask that you read a vignette from a made-up court case on burglary and then you will be required to give a sentencing length. Finally, we will ask a few personal questions.

5. RISKS/BENEFITS

This study includes questions about your views on crime, including burglary and emotionally-charged film clips. Because you will be reading about crime and watching possibly disturbing films, there is a possibility that you experience discomfort. This research, however, does not involve any psychological, legal, social, emotional, or physical risk greater than you would experience in your everyday life while reading about, hearing about, watching, or discussing crimes and emotions. By participating in this study, you will gain first-hand knowledge of the methods that psychologists use to gain knowledge. Moreover, the research will add to our

understanding of people's beliefs and behaviors and you will receive \$2 compensation for your participation in fully completing the survey.

6. CONFIDENTIALITY

Although the survey will ask you to answer questions about yourself and your opinions (e.g., age, gender, and attitudes), this information will not allow anyone to know that you have participated in this study nor to identify your responses as your own. The researchers have taken all reasonable measures to protect your identity and responses. For example, the data is (TLS) encrypted (also known as HTTPS) and is stored on a password protected database. However, e-mail and the internet are not 100% secure, so it is also suggested that you clear your computer's cache and browser history to protect your privacy after completing the survey. After your participation, data will be stored on secure, password protected servers at Qualtrics.com. The data will be downloaded on a local computer for analysis, but is fully anonymous and there will be no identifying information used. All data will be archived using secure servers for at least 5 years to ensure time for publication, and to meet requirements associated with publication by the American Psychological Association. Your data will only be reported in combination with the data of all other participants as results in published scientific studies.

7. VOLUNTARY NATURE OF THE STUDY

Your decision whether or not to participate in this research will not affect your current or future relations with Drew University. If you decide to participate in this study, you are free to withdraw from the study at any time without affecting those relationships and without penalty.

However, in order to receive the \$2 compensation, you must make it to the end of the survey to get the completion code.

8. CONTACTS AND QUESTIONS

After you complete the study, you will receive a statement that fully outlines the purpose of the study, its methods, as well the study hypothesis. The researchers conducting this study are Bella Landino and Patrick Dolan. You may ask any questions you have right now. If you have questions later, you may contact the researchers at ilandino@drew.edu. If you have questions or concerns regarding this study and would like to speak with someone other than the researchers, you may contact Chair of the Drew University IRB, Alex de Voogt at adevoogt@drew.edu.

9. STATEMENT OF CONSENT

Please verify the following: The procedures of this study have been explained to me and my questions have been addressed. I understand that my participation is voluntary and that I may withdraw at any time without penalty. If I have any concerns about my experience in this study (e.g., that I was treated unfairly or felt coerced to participate), I may contact the Chair of the Drew Institutional Review Board regarding my concerns.

○ **I agree to participate, am at least 18 years old, AND do not have a current relation with Drew University (as a student or employee). By clicking this option, you are indicating your consent to participate.**

○ **I do NOT agree to participate OR I am NOT at least 18 years old, OR I have a current relation with Drew University (as a student or employee). If you click this option, you are indicating that you do not consent to participate and will be redirected from the study.**

Appendix B**Questionnaire**

Welcome! Thank you for your interest in our study. This survey will ask questions about your decision making as a potential juror in a court case, as well as emotions surrounding crime-based films.

[New page]

To begin, we would like to ask your current emotional status before beginning the film clip.

Happy

Angry


Sad

Neutral

[New Page]

[One third of participants will be assigned to the film clip inducing anger, one third to sadness and the last will be assigned to a neutral film clip.]

Please watch the following clip from an emotionally-charged crime-based film.

[Anger Group Film Clip - *In the Name of the Father*]  In the Name of the Father Clip

[Sadness Group Film Clip - *Dead Poets Society*]  Dead Poets Society Movie Clip

[Neutral Group Film Clip - *The Lover*]  The Lover Movie Clip

[New page]

Now, we would like to ask how you feel after watching this film.

Happy

Angry

Sad

Neutral

[New Page]

Please select “strongly agree” to show you are paying attention to this questionnaire.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

Moving forward, we would like you to read the following burglary case and later give your opinions on sentencing.

[Half of participants will be assigned to the severely emotional case and half will be assigned to a controlled neutral emotional case.]

[Severe Emotional Injury Case]

Sharon Martin's apartment was burglarized while she was away. She had gone to visit her parents for the weekend. When she returned, she walked into her apartment and found that someone had come in and ransacked it. Her belongings were thrown all over the floor. Her jewelry and her computer were stolen. Several weeks later, a suspect was arrested when he was caught trying to break into another apartment in the neighborhood. The defendant confessed to the burglary of Sharon Martin's apartment, and eventually pled guilty in court. At the sentencing hearing, the judge hears the defendant's account of the crime, and hears from Sharon Martin. She says that the burglary has made her feel very afraid, vulnerable and depressed. She stayed home from work for two days after the burglary. Now she is back at work, but she still has problems sleeping. She finds herself worrying often that something similar will happen to her again, and she can't stop thinking about the fact that she will probably never get her jewelry or her computer back. The defendant has a criminal record that includes several burglaries and thefts.

[Control Case]

Sharon Martin's apartment was burglarized while she was away. She had gone to visit her parents for the weekend. When she returned, she walked into her apartment and found that someone had come in and ransacked it. Her belongings were thrown all over the floor. Her jewelry and her computer were stolen. Several weeks later, a suspect was arrested when he was caught trying to

break into another apartment in the neighborhood. The defendant confessed to the burglary of Sharon Martin's apartment, and eventually pled guilty in court. At the sentencing hearing, the judge hears the defendant's account of the crime, and hears from Sharon Martin. She says that she knows she will probably never get her jewelry or computer back.

[New Page]

Now, because the defendant already pled guilty to their crimes, we would like you to give them a sentencing length. (required)

No jail time (probation)	0.5 years	1 year	1.5 years	2 years	2.5 years	3 years	3.5 years	4 years	4.5 years	5 years
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[New Page]

Finally, we would like to know a few demographic questions about yourself.

What is your gender?

Male

Female

Non-binary

Prefer not to say

Other: _____

What is your age: ____

What is the highest level of education you've completed?

No schooling completed

Nursery school to 8th grade

Some high school, no diploma

High school graduate, diploma or equivalent

Some college credit, no degree

Trade/technical/vocational training

Associate degree

Bachelor's degree

Master's degree

Professional degree

Doctorate degree

Thank you for completing our survey!

Appendix C**Juror Emotions on Sentencing Decisions****Debriefing Form****1. PURPOSE OF THE STUDY**

The study in which you just participated was designed to assess the impacts of emotions on juror's decision making and sentencing. We aimed to test how emotion-eliciting films and made-up case excerpts correlated with certain sentencing lengths for a crime. Present research has shown an influence of emotions from victim impact statements, as well as the use of these films in eliciting emotions in participants. We combined this research to understand jurors' emotions and their decision making.

2. METHODOLOGY

In this study you were asked to describe your current emotions before assigning you to a particular emotion. We then assigned you to watch a sensitive and emotionally-charged film clip that aimed to make you feel one of the three emotions: anger, sadness, or a neutral emotion. After this, we asked you to describe your emotions after watching the film clip. Then, we assigned you to a made-up burglary court case of one of three severity levels: severely emotional impact statement, mildly emotional impact statement, and a neutral impact statement. Based on these two factors, we require you to give a sentencing length, with the intention of seeing whether or not the emotions impact decision making in the court. Finally, we asked a few background questions, just to understand the types of participants we were studying.

3. ADDITIONAL RESOURCES

For more information on the topic of this research, visit the following research articles we used in the foundation of our study:

Nadler, J., Rose, M.R. (2003). Victim impact testimony and the psychology of punishment.

Cornell Law Review, 88(2), 419-456. <http://scholarship.law.cornell.edu/clr/vol88/iss2/6>

Esnard, C., Vibert, N. (2021). Juror's emotional state, attention focus, and judicial judgment in a criminal court. *Journal of Cognitive Psychology*, 33(4), 439-452. doi:

ff10.1080/20445911.2021.1923723ff.

Núñez, N., Schweitzer, K., Chai, C.A., Myers, B. (2015). Negative emotions felt during trial: the effect of fear, anger, and sadness, on juror decision making. *Applied Cognitive*

Psychology, 29, 200-2009. doi: 10.1002/acp.2094

Schaefer, A., Nils, F., Sanchez, X., Philippot, P. (2010). Assessing the effectiveness of a large database of emotion-eliciting films: A new tool for emotion researchers. *Cognition and Emotion*, 24(7), 1153-1172. doi: 10.1080/02699930903274322

4. CONTACT INFORMATION

If you are interested in learning more about the research being conducted, or the results of the research of which you were a part, please do not hesitate to contact Bella Landino at ilandino@drew.edu, Patrick Dolan at pdolan@drew.edu, or the Chair of the Drew University IRB, Alex de Voogt at adevoogt@drew.edu.

Thank you for your help and participation in this study.

Completion code: Please enter this code into Connect Cloud Research page to verify that you have completed the survey: **9281986349**