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SHAPING INTERPRETATIONS: THE ROLE OF EVIDENCE PRESENTATION AND
EVIDENCE AMBIGUITY IN MOCK JUROR DECISIONS

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Shaping Interpretations: The Role of Evidence Presentation and Evidence Ambiguity in
Mock Juror Decisions

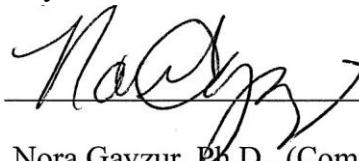
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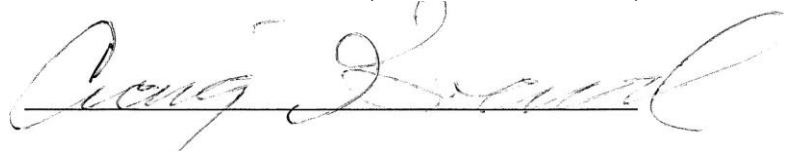
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Abstract

Jurors are expected to make rational, evidence-based decisions in criminal trials. However, research shows that juror judgments are often influenced by extraneous factors unrelated to the evidence, which can undermine the fairness of the justice system. This study investigated how evidence presentation format (multimedia vs. text-only) and evidentiary ambiguity (clear vs. ambiguous) interacted to influence juror guilt judgments, hypothesizing that multimedia presentations would promote deeper processing, leading to greater sensitivity to evidence clarity. A mixed factorial experimental design was employed with 77 university participants recruited online, manipulating presentation format between subjects and evidence ambiguity within subjects. Results demonstrated that multimedia presentations were rated lower in terms of guilt, revealing a significant interaction between presentation format and evidence ambiguity. Participants exposed to multimedia presentations rated guilt lower for ambiguous evidence compared to clear evidence, indicating enhanced discrimination. Conversely, text-only participants rated guilt higher for ambiguous evidence, suggesting greater reliance on heuristic cues. The findings partially confirm the hypothesis: multimedia presentations facilitated deeper processing and sensitivity to evidence clarity, while text-only formats led to increased heuristic reliance under ambiguity. Enhancing juror engagement through multimedia presentations may help safeguard justice by supporting more accurate evaluations of complex evidence. Future studies should examine the effects of physical and emotional courtroom environments, incorporate directly relevant multisensory evidence, and consider factors such as cognitive load to better understand how presentation format and ambiguity influence juror cognition and verdicts.

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Shaping Interpretations: The Role of Evidence Presentation and Evidence Ambiguity in Juror Decisions

Jurors are tasked with the critical responsibility of evaluating evidence and determining one's guilt or innocence. Although the justice system operates under the assumption that jurors engage in rational evaluation of evidence, research indicates that jurors do not always make decisions based on factual information (Devine et al., 2009; Thompson & Dennison, 2004). Alternatively, jurors may respond based on factors not presented in evidence (e.g., what the defendant looks like). These unrelated factors not relevant to the case can pose an issue for the criminal justice system, as the system wants justice to be blind of these unrelated factors. These unrelated factors can range from social identities of witnesses or lawyers (e.g., racial identity) to how evidence is presented to a jury (e.g., audiovisual versus auditory only evidence). Understanding how individuals process this information and the various influences on decision-making are crucial in this context.

Decision Making

The accumulation of sensory information is involved in decision making. Individuals' interpretation and evaluation of information is shaped by their pre-existing knowledge, beliefs, and expectations, organized in the form of schemas (Simon, 2019). Schemata are frameworks that serve as interpretive lenses that organize information entering the memory system (Bartlett, 1932; Horowitz et al, 2001). These schemata about persons, settings, or events help with making sense of stimuli, in which their mental image of these entities is used to identify key features, put details together, and guess what events may happen next.

In addition to guiding perception and interpretation, these schema-driven processes interact with broader reasoning processes. Coherence-based reasoning provides a model of how uncertain or conflicting content is synthesized. According to this approach, people construct a mental network of interconnected facts and propositions (Simon, 2019). This network gradually shifts towards a state of coherence, wherein a dominant interpretation emerges, enabling people to over- or under-weight material based on how well it fits an emerging narrative. This dynamic can lead to individuals becoming vulnerable to extraneous information which influences their entire representation of information, typically without conscious awareness.

This susceptibility to outside influence is further clarified by the dual-process theory of cognition, which outlines the interplay between external factors and suboptimal or biased outcomes in decision-making. This framework distinguishes between two modes of information processing: automatic and controlled. Controlled processing is deliberate, effortful, and flexible, allowing individuals to deal with novel situations (Fabio et al., 2019). It requires attentional resources and is capacity-limited, therefore it might be disrupted under conditions of high cognitive load (Shiffrin & Schneider, 1977). In contrast, automatic processing is fast, effortless, and largely unconscious. It proceeds in parallel with controlled processes and is difficult to alter or suppress once learned in long-term memory. Automatic processes are typically developed through extensive practice (Shriffrin & Schneider, 1977). Automatic processes emerge due to learned associations that allow for rapid, effortless responses to certain stimuli. These processes interfere with an efficient controlled search process, allowing attention to be captured involuntarily by specific features in the environment. This suggests that automatic

capture to attention to irrelevant stimuli can interfere with deliberate, controlled processing. This interference helps provide understanding for how automatic biases might disrupt more complex decision-making tasks, where attentional resources and cognitive control are critical.

In a related line of research, Posner and Snyder (1975) explored how cognitive processes affect task performance. The parallel activation of multiple stimuli can create difficulty for individuals filtering out irrelevant information, especially when it has a semantic relationship to the attended input. This limitation arises due to a conscious processing system with a limited capacity, which must prioritize certain inputs or memory structures while inhibiting others. Therefore, the availability of resources for processing additional stimuli is limited, and an individual employing conscious strategies to direct their attention toward specific input channels is not fully able to prevent automatic activation of unattended information (Posner & Snyder, 1975). This information can still intrude, particularly when stimuli carry emotional significance. This observation further supports the idea that automatic and controlled processes operate in tandem, influencing how effectively an individual can manage attention and make decisions in complex situations.

Decision-making is shaped by memory processes that often operate outside of conscious awareness. People interpret information through mental frameworks, or schemas, which help organize sensory input and guide perception (Bartlett, 1932; Horowitz et al., 2001; Simon, 2019). These constructs influence which features are perceived versus overlooked, and they also shape how conflicting or ambiguous information is woven into a coherent narrative. Much of this occurs automatically, with

minimal effort or control (Posner & Snyder, 1975; Shiffrin & Schneider, 1977). When cognitive load is high, automatic processes can override deliberate reasoning, drawing attention to irrelevant or emotionally charged information and disrupting focused thought. Because controlled attention has limited capacity, individuals are often unaware of the extent to which automatic mechanisms influence their judgments (Posner & Snyder, 1975; Shiffrin & Schneider, 1977). This dynamic between cognitive constraints and unconscious processing becomes especially important when considering how individuals engage with visual and verbal information, where the format and quality of content can either support or hinder effective information processing.

Visual and Verbal Information Processing

When information is processed, there are different senses (e.g., visual, auditory, haptic) that humans experience. When information is presented, one or more senses can become engaged, depending on the stimuli. Multisensory information refers to multiple sensory modalities, while unisensory information involves only one modality. Memory is typically enhanced for events that are characterized as multisensory than for those experienced in a unisensory format (Pecher & Zeelenberg, 2022; Shams & Seitz, 2008). One plausible mechanism underlying this phenomenon is multisensory integration, which involves integrative processing linking information from different modalities into a single object representation. Multimodal input engages multisensory brain areas beyond those involved in unisensory processing, leading to a stronger memory trace. Thelen et al. (2015) suggests that congruent multisensory inputs, such as a picture and a sound connected to the same object, lead to encoding of a stronger representation of the target. For example, visual stimuli can elicit responses within auditory cortices, specifically

when those visual stimuli (words) had previously been learned alongside their corresponding vocalizations (Nyberg et al., 2000; Wheeler et al., 2000).

The advantage of multisensory exposure is that multiple cues are encoded to be remembered better due to enhanced retrieval cues that do not interfere with each other. This idea that information is processed in two distinct systems is outlined within dual coding theory, which suggests that verbal and non-verbal information are processed through separate but interconnected systems (Paivio, 1991). One implication of this theory is that when both verbal (such as spoken or written text) and non-verbal (such as images) cues are presented together, they activate parallel pathways that may have additive effects on recall. Therefore, combining these types of information can lead to enhanced memorability.

Ambiguity can impair memory by increasing cognitive processing demands. Ambiguity generally refers to situations where the implication of presented information is uncertain, contradicting, or weakly favor one side (Horowitz et al., 2001). Ambiguous phrases- such as “could have”, “not clear”, and “possibly” lack specificity and leave room for multiple interpretations. The semantic ambiguity hypothesis proposes that uncertainty in the perceived intensity of common semantic attributes, such as concreteness, affects the encoding process, and these processing differences have later impacts on episodic memory (Brainerd et al., 2022). Ambiguous information leads to individuals actively searching for additional context, increasing the workload imposed on working memory for tasks requiring mental processing (Franceschetti et al., 2024). This heightened demand on working memory, known as cognitive load, may interfere with effective encoding and reduce clarity of recall.

Memory performance is enhanced when multiple senses are engaged, as multisensory integration allows inputs from different modalities to be encoded into a unified mental representation. The presence of both verbal and non-verbal information activates complementary systems, strengthening recall. Visual stimuli containing vivid and accessible characteristics support careful processing, while cognitive load or ambiguity can lead individuals to rely on superficial cues. These dynamics are notably relevant in juror decision making, where individuals must evaluate complex and often ambiguous evidence under conditions of limited cognitive resources.

Juror Decision Making

In courtroom scenarios, where jurors are typically laypersons with limited legal knowledge and no formal training in evaluating forensic evidence, it is important to consider what factors lead to extraneous influence. When an individual is limited in their ability or motivation to understand presented information, cognitive load increases and accessibility decreases, which complicates their ability to process complex information effectively. Under these conditions, jurors are more likely to rely on heuristic cues—such as a speaker’s confidence or the perceived sophistication of a presentation—rather than the substantive content of the evidence itself (Guadagno et al., 2013; Salerno et al., 2017). This reliance on heuristics is consequential in trials involving technical jargon, ambiguous facts, or emotionally charged narratives, where it may distort legal judgment. Understanding how jurors process and integrate information when making decisions under these varying conditions is further explained by the Elaboration Likelihood Model (ELM).

According to the Elaboration Likelihood Model, people engage in either enriched or simplified processing, proposing that complex information can be evaluated through a central or peripheral route (Martín et al., 2007). The central route is engaged when individuals are both motivated and able to carefully consider information, leading them to base judgments on the quality of information itself (Rempel et al., 2019). Research suggests that visual aids can enhance this type of processing by making evidence more vivid and accessible, thereby promoting more effortful consideration than verbal or written information alone (Nemeth, 2011). On the other hand, when an environment is cognitively taxing, or when subjects have little prior knowledge or interest related to the decision domain, they are more likely to engage in peripheral processing. This involves relying on heuristic cues, such as aspects of a message or credibility of a presenter, to determine the value of presented information (Rempel et al., 2019). As a result, individuals may make decisions based on these extrinsic factors, not on the content or merits of what is presented to them. Reliance on external cues may also reflect broader cognitive challenges, as research on memory processes has shown that ambiguity can impact how information is encoded and retrieved.

Ambiguity in courtroom discourse also intensifies jurors' reliance on heuristics and biases. When evidence is unclear or equivocal, jurors experience uncertainty and discomfort, prompting them to seek indirect cues or secondary indicators to guide their decisions (Simon, 2019; Smith et al., 2012). The liberation hypothesis encapsulates this dynamic by positing that ambiguous evidence "liberates" jurors from strict adherence to legal standards, increasing their susceptibility to extralegal influences such as personal biases or social norms (Devine et al., 2009; Kalven & Zeisel, 1966). Specifically, jurors

attempting to sort through cursory, tangential, or conflicting evidence may struggle to reach a verdict using the logic and reasoning of central-route processing (Devine et al., 2009). Ambiguous evidence can ultimately undermine jurors' reliance on objective legal criteria by increasing uncertainty and encouraging the use of mental shortcuts.

Ultimately, jurors integrate disparate, often ambiguous information into a coherent narrative that justifies their verdict (Holstein, 1985). This narrative construction, shaped by heuristic processing and emotional responses, serves as a persuasive framework through which jurors make sense of complex trial evidence. The Elaboration Likelihood Model helps explain this process by outlining how jurors may alternate between central and peripheral routes of information processing depending on their motivation and cognitive capacity. When central processing is hindered by ambiguity or cognitive overload, jurors tend to rely more on heuristic cues, which can significantly influence their judgments of guilt or innocence.

Present Study

Overview

Based on the reviewed literature, automaticity, multisensory integration, and ambiguity have a critical role in shaping juror decision making. Automatic cognitive processes operate largely outside conscious awareness, influencing how sensory information is filtered, organized, and integrated with existing schemas to form cohesive interpretations. These automatic mechanisms often compete with controlled, deliberate reasoning, especially under conditions of cognitive load or emotional arousal. Multisensory integration enhances memory for information presented across multiple modalities. Combining verbal and non-verbal cues into unified mental representations

can thereby strengthen recall and support more effortful processing. However, ambiguity in trial information increases cognitive demands and uncertainty, prompting jurors to rely more heavily on heuristic cues and biases rather than on analytic evaluation.

Collectively, these dynamics create a context that can leave jurors vulnerable to extra-evidentiary influences when evaluating conflicting, complex, or emotionally impactful material in a courtroom setting. The understanding of the influence of these outside factors is critical to avoid compromising the impartiality of the criminal justice system. The present study therefore aimed to investigate how information presentation format (multimedia vs. text-only) and evidentiary ambiguity (clear vs. ambiguous) affect juror judgments of guilt. Specifically, it explored whether multimedia presentations alter jurors' interpretations differently when evidence is clear compared to when it is ambiguous. These insights inform hypotheses regarding the effects of the experimental factors.

Rationale and Hypotheses

Evidence presented in clear, definitive language will enable jurors to focus on direct and unambiguous indicators of guilt because the information is absent of any uncertainty. Additionally, enriched presentations that incorporate multiple sensory cues in a multimedia format will enhance jurors' engagement, promoting more effortful processing and reducing reliance on heuristic shortcuts. Therefore, it is predicted that multimedia presentations will elicit higher guilt ratings than text-only formats. Evidence that is clear in nature will also generate higher guilt ratings than ambiguous evidence. Importantly, an interaction is predicted such that the difference in guilt ratings between clear and ambiguous evidence will be more pronounced among those viewing multimedia

information, as enriched presentations facilitate deeper processing of these clarity cues. On the other hand, text-only information will result in a diminished effect due to greater reliance on external factors.

Method

Participants

An a priori power analysis was performed using G*Power Version 3.1 (Faul et al., 2007) based on a small to medium effect size ($f = .15$). With 80% power and an alpha level of 0.05, 90 participants were needed. Participants were recruited through SONA for partial course credit. All participants had to meet the following criteria: (a) at least 18 years of age or older, (b) hold U.S. citizenship, (c) has proficiency in English, and (d) missing no more than one memory manipulation check question. A total of 122 participants were recruited. Of those 122 participants, 30 were eliminated due to non-completion, five were eliminated for taking too long to complete the study (i.e., over 20 minutes), and 10 (six in the text-only group and four in the multimedia group) were eliminated for having two or more questions incorrect in the memory test. That left a total of 77 participants who completed the study, with 43 participants in the multimedia group and 34 participants in the text-only group.

Materials

Case Vignettes

Two case vignettes involving criminal murder cases were displayed to participants using Qualtrics. Each case began with a narrative that outlines the background information about the event taking place, as well as an introduction of the suspects involved. These narratives contain approximately the same amount of

information. Information about evidence that contains both textual descriptions and accompanying images (multimedia format) or textual descriptions were shown. Verbal stimuli included in each case consisted of four statements outlined in either clear or ambiguous language. Clear evidence is defined as wording that demonstrates clear favor of the prosecution (ex. “footage shows defendant firing at the victim”), while ambiguous evidence includes indeterminate language that leaves room for multiple interpretations (“part of the confrontation was captured but not the firing itself”).

Memory Manipulation Check

To ensure participants were reading and understanding the case vignettes, a memory test was given. Participants were instructed to pay attention to the information presented in the vignette and informed that there was a test following the reading. This instruction occurred before they made a guilt rating. This test included four multiple-choice questions that targeted basic details about the evidence presented. Participants were asked about what kind of weapon was involved in the crime, where the crime took place, forms of evidence presented, and the testimony given by the defense.

Procedure

This study employed a 2 x 2 mixed factorial design with presentation format (multimedia vs. text-only) as the between-subjects variable and evidence ambiguity (clear vs. ambiguous) as the within-subjects variable. This design allowed for testing mean differences between presentation format groups while exposing participants to repeated measures within the ambiguity levels. Rating of likelihood of guilt was used as the dependent variable. This was measured on a seven-point Likert-type scale from 1 (Not Guilty) to 7 (Extremely Guilty).

Participants were randomly assigned to one of the between-subjects conditions, viewing evidence in multimedia or text-only format. Each participant evaluated evidence under two within-subjects conditions of evidence ambiguity: clear and ambiguous. The order of ambiguity conditions was counterbalanced across participants to control for order effects. After informed consent, participants then reviewed case vignettes and were presented with descriptions of evidence items before the memory test. After the memory test, participants rated the defendant's level of guilt. After completing the first guilt rating, they then completed the second vignette, took a memory test, and provided another guilt rating. Finally, participants provided demographic details (e.g., U.S. citizenship, age). Upon completion of the study, participants were debriefed regarding the study's purpose and background and thanked for their participation.

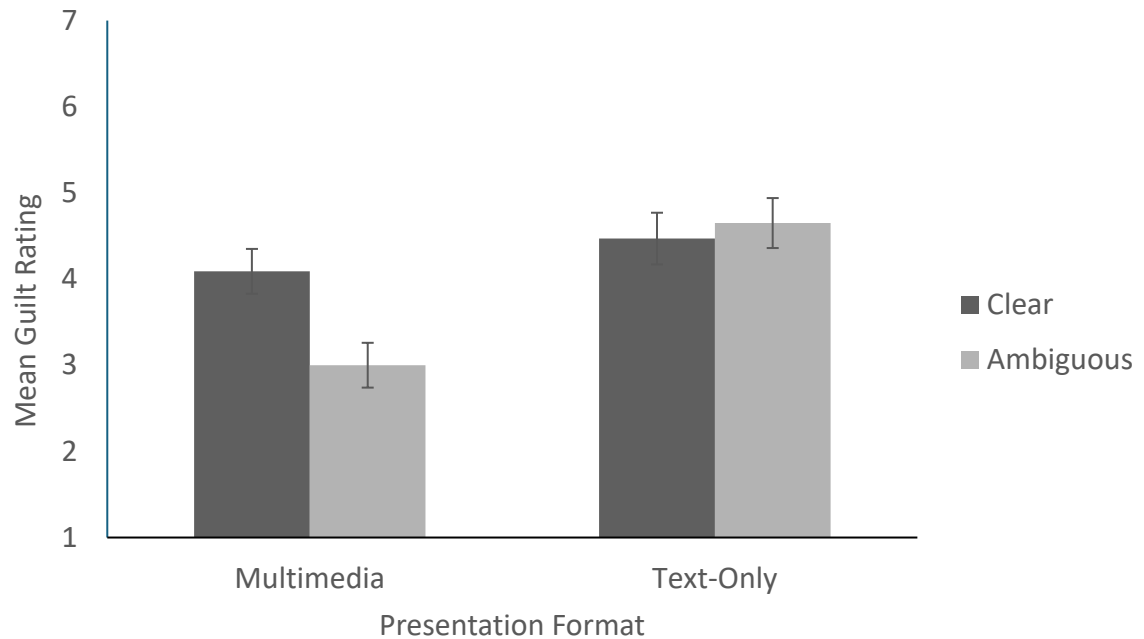
Results

Mean scores were submitted to a 2×2 mixed analysis of variance (ANOVA) with presentation format (multimedia vs. text-only) as the between-subjects variable and evidence ambiguity (clear vs. ambiguous) as the within-subjects variable. Assumption tests for homogeneity of intercorrelations, sphericity, and homogeneity of variance were met. There was a significant main effect of presentation format, $F(1, 75) = 14.41$, $p < .001$, $\eta^2p = .161$, indicating that participants in the multimedia condition ($M = 3.55$, $SD = 1.78$) differed from those in the text-only condition ($M = 4.56$, $SD = 1.62$). However, no significant main effect of evidence ambiguity was found on guilt level ratings, $F(1, 75) = 2.52$, $p = .117$, $\eta^2p = .033$, with mean ratings for clear evidence ($M = 4.26$, $SD = 1.72$) and ambiguous evidence ($M = 3.73$, $SD = 1.88$) not differing significantly.

Importantly, a Presentation Format $\times$ Evidence Ambiguity interaction was observed, $F(1, 75) = 11.55, p = .002$. Mean guilt ratings in the multimedia group were lower for ambiguous evidence ($M = 3.00, SD = 1.69$) compared to clear evidence ($M = 4.09, SD = 1.86$), indicating a greater likelihood to convict in the clear evidence condition. In the text-only group, guilt ratings were not different for ambiguous evidence ($M = 4.65, SD = 1.72$) than for clear evidence ($M = 4.47, SD = 1.52$). Moreover, the difference in guilt ratings between clear and ambiguous evidence was larger in the multimedia group than in the text-only group. Figure 1 demonstrates the findings. A test of simple effects demonstrated a significant ambiguity effect (higher guilt ratings for clear versus ambiguous data), $t(43) = 2.93, p = .005$, for the multimedia group, while the text-only group did not demonstrate the effect, $t(33) = -.40, p = .695$.

Figure 1

Juror Guilt Ratings based on Presentation Format and Evidence Ambiguity



Note. This figure demonstrates the interaction between presentation format (multimedia and text-only) and evidence ambiguity (clear and ambiguous). Mean guilt ratings (1 = not guilty; 7 = extremely guilty) were recorded. Errors bars represent the standard error of the mean.

Discussion

The goal of the present study was to investigate how evidence presentation format (multimedia vs. text-only) and evidentiary ambiguity (clear vs. ambiguous) influence juror judgments of guilt. It was hypothesized that multimedia presentations, by engaging multiple sensory modalities, would facilitate deeper processing and lead to higher guilt ratings compared to text-only presentations. It was also predicted that clear evidence would yield higher guilt ratings than ambiguous evidence. Finally, an interaction effect was anticipated, with the gap in guilt ratings for clear and ambiguous evidence being more pronounced in the multimedia group. This reflects enhanced sensitivity to cues of clarity when information is presented with multiple sensory channels.

Findings and Implications

The findings partially support these predictions. A significant interaction is observed between evidence ambiguity and presentation format on guilt ratings. Participants exposed to multimedia presentations gave lower guilt ratings for ambiguous evidence compared to clear evidence, indicating that multimedia formats aid mock jurors in distinguishing between levels of evidentiary clarity. On the other hand, participants exposed to text-only information demonstrate no difference in evidence ambiguity, suggesting a continued reliance on heuristic or extraneous cues when processing less rich

information. There was no significant main effect of evidence ambiguity. These findings suggest that the impact of ambiguity on judgment depends on how evidence is presented.

These results align with previous research showing that jurors do not always base decisions solely on objective evidence (Devine et al., 2009; Thompson & Dennison, 2004). The justice system assumes rational, evidence-based decision-making, but automatic cognitive processes and heuristics often shape judgments outside of conscious awareness (Shriffin & Schneider, 1977; Simon, 2019). The current findings extend this by demonstrating that multisensory integration through multimedia presentation can enhance jurors' ability to evaluate evidence more critically, reducing reliance on biases when evidence is ambiguous. Previous work also highlights that under conditions of ambiguity, jurors tend to rely on external cues (Guadagno et al., 2013; Salerno et al., 2017). This study suggests that multimedia presentations may counteract this tendency by providing richer, more accessible information that supports central-route processing outlined by the Elaboration Likelihood Model (Martín et al., 2007). In contrast, text-only presentations may fail to fully engage jurors and lead them to become more vulnerable to extraneous influences and make higher guilt ratings even when evidence is ambiguous.

Limitations and Future Directions

Despite the insights gleaned from this study, caution should be taken when applying these findings in a real-world trial, as they may not fully capture the complexity and nuance of real-world legal trials. The study involved participants making judgments individually rather than as part of a deliberating jury. In a real courtroom setting, jurors engage in collective decision-making, which can influence individual opinions through social dynamics or group reasoning processes (Asch, 1956; Janis, 1972). The

collaboration in the decision-making process may be highly influential in how jurors decide in courtrooms. Thus, future studies should examine group dynamics and how they influence juror decision making when relying on controlled processes.

The physical environment could influence how jurors respond. The study was conducted entirely online and consisted of a sample of college students, taking away from the physical and social context of a courtroom environment. Factors such as the presence of attorneys and the emotional atmosphere of a trial were not replicated, which could potentially affect participant engagement and decision-making processes. The effect of the environment should be examined, as studies have shown that the physical environment can affect how we encode and retrieve information (Godden & Baddeley, 1975; Thomson & Tulving, 1970; Tulving & Thomson, 1973). Future research should investigate how the physical environment can influence juror decision making.

In the present study, the images used in the multimedia condition were not directly tied to the evidentiary content of the cases. Rather than depicting crime-scene photographs or physical evidence, the images consisted of semantically related but weakly relevant to the evidence of the case, such as general courtroom settings or a witness pointing. This distinction can be meaningful because research on decorative images, defined as images that accompany text without adding essential information, has produced mixed findings. Some studies indicate that decorative images can reduce cognitive load by offering an additional channel for processing information (Schneider et al., 2018a, 2018b), whereas other research suggests that such images increase extraneous cognitive load and interfere with learning (Scharinger et al., 2020; Schüler et al., 2015).

These results suggest that the outcomes differ based on the type of cognitive load involved (Sweller et al., 1998).

It is also possible that the images increased extraneous cognitive load because they were not directly connected to the evidentiary details of the case. However, intrinsic cognitive load likely remained unchanged, as the complexity of the material itself was constant. If this interpretation is accurate, the images may have exerted only a limited effect on overall processing and memory. However, a competing explanation is also plausible. Despite their weak relevance, the images may still have supported memory through multisensory processing. This interpretation is consistent with prior research showing that even non-informative images can facilitate recall through multisensory integration (Shams & Seitz, 2008) as well as through well-established image-superiority effects (Defeyter, 2009; Paivio, 1991; Paivio & Csapo, 1973).

The fact that the ambiguity effect emerged specifically within the multimedia condition provides tentative support for this second interpretation. This pattern suggests that images, even when not strongly tied to evidentiary content, may provide a general memory benefit that enhances sensitivity to differences in evidentiary clarity. Nevertheless, this conclusion remains preliminary. Future research should examine whether similar effects are observed when the images depict actual evidentiary material rather than loosely related scenes. This discovery is particularly important given evidence that reading text alone imposes greater cognitive load than processing text alongside images, in part because verbal and visuospatial information rely on separable working memory systems (Baddeley & Hitch, 1974; Brooks, 1968).

In real-world context of courtrooms, information is presented to a jury, and many times that information portrays graphic content, which can influence emotional responses in jurors. This study did not use nor assess emotionality of the images or the text but instead focused on cognitive processing pathways. Future research should examine how emotional engagement interacts with presentation format and evidence ambiguity to shape guilt judgments. Emotionally vivid evidence can increase perceived intent and conviction rates even when factual content remains constant (Bright & Goodman-Delahunty, 2006), and emotional reactions systematically influence legal blame and punishment judgments (Feigenson & Park, 2006). The Appraisal Tendency Framework further suggests that emotions such as anger and fear do not simply intensify reactions but shift how people evaluate responsibility or culpability (Lerner et al., 2004). Including emotion as a factor therefore may reveal whether heightened arousal changes how jurors respond to evidence.

Conclusion

Overall, the study demonstrates that the format and clarity of evidence presentation significantly affect juror judgments, with multimedia presentations enhancing jurors' ability to differentiate between clear and ambiguous evidence more effectively. These findings have important implications for the criminal justice system. Professionals in the legal field could use this information to design more effective evidence presentations that minimize bias and support juror comprehension. By enhancing jurors' ability to process complex information accurately, multimedia evidence may contribute to fairer trial outcomes within the justice system. Future efforts should prioritize incorporating multisensory evidence presentation techniques while also

addressing the limitations identified in this study. By doing so, the legal system can better ensure that jurors make decisions grounded in a clear understanding of the evidence, ultimately promoting justice and reducing wrongful convictions.

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Appendix A

Multimedia Material

Note: The text-only group saw the following descriptions without the accompanying images.

Case 1:

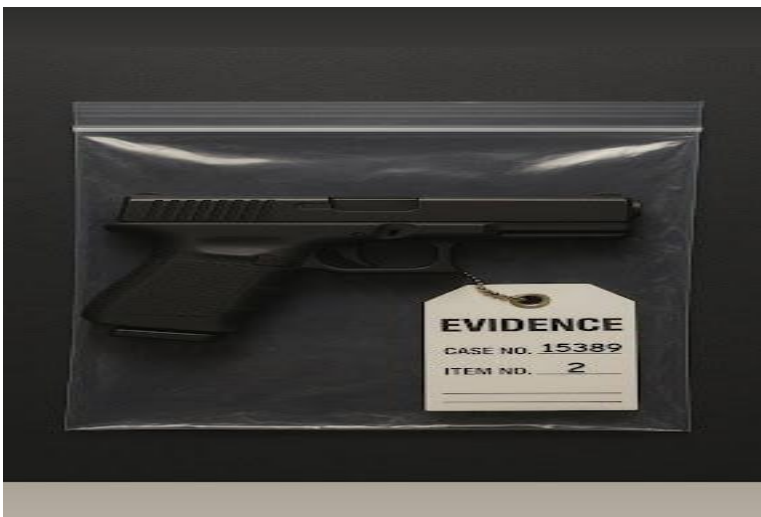
Jordan Avery, age 30, is charged with the murder of Taylor Morgan, age 29. On the evening of August 14, 2023, Taylor was found in the parking lot of a local grocery store with two gunshot wounds to the chest.



Police responded quickly after a nearby witness called 911, reporting gunfire. During the trial, a store employee testified that they clearly saw Jordan raise a handgun and fire two shots at Taylor.



The employee described the shooter's clothing and build as matching Jordan's. Investigators recovered a 9mm handgun from Jordan's vehicle, which matched the caliber of the bullets found in the victim. Surveillance footage from a nearby ATM showed her raising the gun and firing in the Taylor's direction. Further, GPS data from Jordan's phone placed her at the scene at the time the shooting occurred.



The defense firmly challenged the prosecution's evidence. They argued that the store employee's eyewitness identification was unreliable due to poor lighting and stress but insisted there was no direct proof Jordan fired the gun.



The defense emphasized that the handgun recovered lacked Jordan's fingerprints, which strongly suggested she did not handle the weapon during the shooting. They also pointed out that the surveillance footage, while showing movement near the victim, did not capture the actual gunfire.



The defense highlighted that the GPS data only confirmed Jordan's presence in the area and did not place them at the exact location of the shooting. Jordan testified unequivocally that she left the area before any shots were fired and denied any involvement.



Case 2:

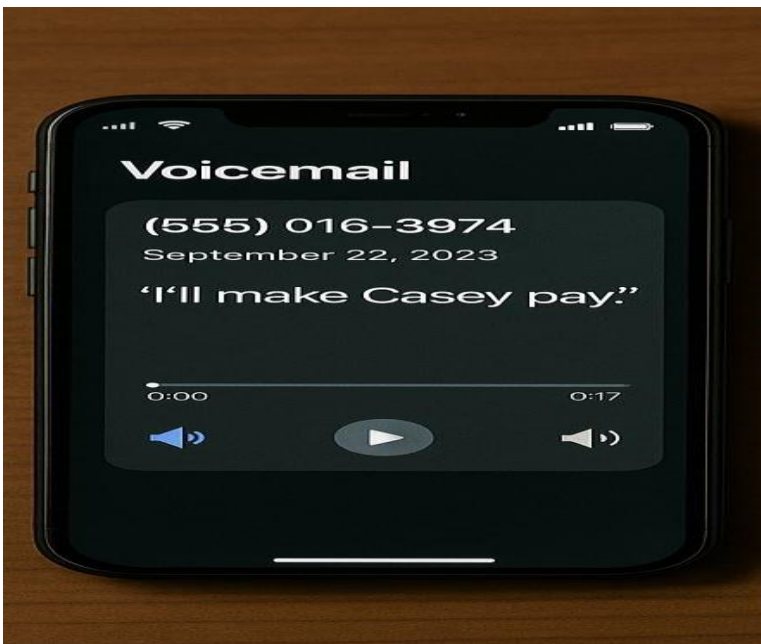
Riley Ellis, age 28, is accused of murdering Casey Lee, age 27. Casey was found stabbed in their apartment on October 3, 2023. Police responded to a 911 call reporting a break-in.



Doorbell camera footage seemed to show Riley leaving Casey's apartment shortly after the estimated time of death, though the image was somewhat unclear. A knife with possible fingerprints of Riley's were recovered from the scene.



A voicemail was played in which Riley might have threatened to “make Casey pay” following a rent dispute. Phone records suggested Riley may not have been where she claimed at the time of the incident.



The defense raised questions about the evidence’s reliability. They said the doorbell camera footage was not definitive about who entered the apartment, noting the person's obscuring hood made identification uncertain.



Regarding the knife, the defense argued that the fingerprints were not clearly identifiable and could have been transferred at an earlier time. They also suggested the voicemail might have been taken out of context and did not necessarily indicate a real threat.



As for the phone records, the defense pointed out that the data was incomplete and did not conclusively place Riley near the apartment during the relevant timeframe. Riley testified that she was running errands during the time in question and denied any involvement in Casey's death, stating she had no motive to harm them.

