Persuading Juries Through Cognitive and Affective Matching

An Honors Thesis (PSYS 499)

by

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Abstract

The United States has a jury system that allows people to be judged criminally or civilly by their peers. This system is supposed to promote fairness and allow truth to prevail. Jury persuasion has been extensively researched as attorneys make a career presenting their cases in a more persuading manner. This current research examined if cognitive and affective matching could be a useful jury persuasion technique. Students from Ball State University participated in research about the effectiveness of cognitive or affective persuasion in a criminal case. First, the participants were assessed on their orientation as either relatively cognitive or relatively affective. Then, participants were randomly assigned to read case briefs with either cognitive or affective messaging. Finally, participants were assessed on how persuaded they were by the argument. The hypothesis that emotion-based arguments will be more influential than fact-based ones for more affectively oriented jurors and that fact-based arguments will be more influential than emotion-based ones for more cognitively oriented jurors was not supported by the results of this research. Limitations of small sample size and the hypothetical set up of the research may have contributed to the lack of significant interactions found, so further research is necessary.

Keywords: jury persuasion, cognitive and affective matching effect, personalize matching effect
Acknowledgments

I would like to thank Dr. Andrew Luttrell for advising me through this project.

I would also like to thank my parents, Scott and Holly Zent, for encouraging me through my entire college journey.
Process Analysis Statement

For my final thesis project, I wanted to combine the knowledge that I had gained from my undergraduate degree with my future goals. Coming into college I knew that I wanted to study psychology because the human mind had fascinated me since I was a young child. I also knew that I wanted to be involved in the criminal justice system. Throughout my time at Ball State with the clubs I joined, the classes I took, and the internship opportunities I was given, I decided to become a lawyer. I wanted to connect my interest and degree in psychology with my passion and future goals in law.

In discussing my project options with my thesis advisor, I remembered one of the attorneys from an internship I had over the summer telling me that “emotional arguments are way better for jury trials compared to the confusing hard science facts”. He clarified that you need both hard facts and emotions to win a case. The sentiment was that emotional evidence and framing of the cases is simply more persuasive to jury members. For example, in a breach of contract case, the jury is more likely to side with the victims who experienced upset compared to a company arguing they did fulfill their contract. This story from the attorney contradicts the research that Dr. Luttrell and other psychologists conduct on personalized matching effects in persuasion. Personalized matching effects are the idea that persuasion is most effective when tailored for a specific person. Usually, this effect is utilized in marketing campaigns, but I wanted to see if it applied to jury persuasion. I tested whether emotional arguments or matched arguments were more persuasive to mock juries.

“Persuading Juries Through Cognitive and Affect Matching” is my thesis that attempts to explore the application of the personalized matching effect on juries. Specifically, I look at cognitive (fact-based) arguments and affective (emotion-based) arguments and the possible interaction with people’s cognitive or affective orientations. The beginning of this project was
very informative to me in basic persuasion techniques due to the vast amounts of information and research available on persuasion. This topic was something that I did not have much education on due to the classes I decided to take, so I enjoyed learning about persuasion. The large amount of research available assisted me in the first semester of my project as I put together all the materials I used for this research as well. Overall, the background research for this project was enjoyable and enlightening.

The process became more difficult as I began to conduct the actual experiment. I knew recruiting participants would be difficult, but the task proved harder than I anticipated. I decided to create a case brief instead of having a true mock jury because I assumed I would be able to recruit more participants. This means that from the beginning the research would not be completely generalizable to a true jury. Since every Psychology 100 student must participate in research for class credit, I used the SONA pool as my largest recruitment method. I also sent out emails and social media posts to recruit. Still, the numbers were quite low. I only recruited 83 participants and 14 did not finish the survey. This was a challenge that many researchers face when asking for human participants. The data collection difficulties resulted in little statistical power in my analysis.

In the end, I did not find a significant interaction or support my hypothesis that the application of the cognitive and affective matching effect would work in jury persuasion. Instead, I learned a lot about the process of conducting official research. This was an enjoyable and difficult experience. I also generally learned about persuasion techniques in a way that will help with my future! While I did not get the results I wanted, I still applied my studies to my future!
Persuading Juries Through Cognitive and Affective Matching

If someone is charged with a crime or has a civil dispute in the United States, that person has the right to a jury of their peers to decide the outcome of the case. So, how do jurors make their decision? While the jury system is supposed to be the most unbiased and objective way to make a decision, lawyers make their careers by persuading juries effectively. The key to persuading juries lies in the lawyer’s ability to become a psychologist to understand the best way to persuade each member effectively. Many trial attorneys use psychological techniques to accomplish their persuasion. In particular, the lawyers must understand how different types of arguments will resonate with individual jurors.

Jury Persuasion

The ability to persuade a jury has always been an attorney’s job. Jury persuasion is important for an attorney to consider even before the trial begins. This is because having a persuadable jury could be the factor that allows the attorney to win their case. (Voss, 2005). Once a jury is selected, the attorney must persuade the jury their side is correct. The art of persuasion may be the deciding factor of a trial, regardless of the truth. Attorneys apply many tactics to persuade a jury beginning with choosing how to present the argument, including ordering the evidence and storytelling.

In jury persuasion, it is suggested that affective components of persuasion are more effective than cognitive components in persuading juries. Affect components of persuasion refer to feelings or emotions associated with an attitudinal object (Haddock & Maio, 2018). Cognitive components of persuasion refer to beliefs, thoughts, and attributes associated with an attitudinal object (Haddock & Maio, 2018). The attitudinal object is an idea, object, or person that is subject
to someone’s evaluative judgment (Haddock & Maio, 2018). Persuasion techniques that appeal to affective components include appeal to a person’s happy or sad emotions, while persuasion techniques appeal to cognitive components include facts or numbers.

Many attorneys argue that emotional or affective evidence should be presented before factual evidence (Voss, 2005). In presenting the affective messaging first, jury members create a story and are more likely to ‘fit’ the cognitive information in the story. This illustrates that if the jurors are persuaded initially, their attitudes or opinions will likely not change. It is suggested that emotional information is better in creating these attitudes for the jury as the jury will be able to create their attitude or opinion towards the case if they are presented with the affective information first as opposed to the cognitive information.

Additionally, presenting the argument as a story seems to be the most convincing for juries (Kritzer, 2009; deGravelles & deGravelles, 2021). The storytelling discussed in this jury persuasion typically uses affective and emotional messaging in persuasion as opposed to fact-based, timelines presentation of the evidence. Storytelling is persuasive to the average person based on schema theory. Research in schema theory indicates that most people have a similar story schema based on traditional story grammars (Mandler, 1984). For example, research shows that participants could organize randomized sentences into story forms that were almost identical across the participants. This illustration shows that participants were able to anticipate what would come next in stories. Furthermore, research indicates participants could recall stories better if they fit into the traditional story schemas. According to schema theory, stories utilize and build our schemas to help us with memory. Another reason storytelling may be persuasive is that stories help build thematic frameworks (Pyszczynski & Wrightsman, 1981). Thematic frameworks build people’s schemas and assist jurors’ understanding of the evidence. Jurors were
influenced by opening statements when they were long, story-like, and provided enough description for the jurors to build a thematic framework. This illustrates that having an emotional story allows the jurors to be persuaded more effectively through schemas and thematic frameworks.

Some evidence may suggest that affective arguments are best, regardless of jury makeup (Vinson, 1985). In this argument, Vinson acknowledged the difference between affective (feeling) decision-makers and cognitive (thinking) decision-makers. Vinson argued cognitive decision-makers can add structure to an affective argument, while affective decision-makers will not make sense of the cognitive argument.

Cognitive and Affective Matching Effect

Are cognitive or affective arguments better? In reality, there seems to be no correct way to persuade. Instead, the importance lies in the type of person you are trying to persuade. Personalized matching of arguments to a specific person on some level generally assists in the persuasion process (Teeny et al., 2020). Personalized matching is effective because it triggers high elaboration processes to occur, which influence the audience to think carefully and possibly change their opinions. Matching to a specific person can be done on different levels, including morals, personal identities, or attitudes. For example, when people’s beliefs have a moral base, they are more influenced by moral-typed arguments over practical arguments (Luttrell et al., 2019). In terms of personal identities, when appeals are framed as particularly advantageous for a specific gender, those who identify with that gender tend to be more impacted (Meyers-Levy & Sternthal, 1991). The personalized matching effect alludes to the possibility that a cognitive or affective argument's success will depend on the audience, known as the cognitive and affective matching effect.
The cognitive and affective matching effect has been examined when the audience’s initial attitude is already cognitively based or affectively based. Edwards (1990) created attitudes towards a made-up drink called Power-Plus and then exposed participants to either cognitive or affective persuasion. When participants had the affective information first, their opinions were more effectively changed by the affective-based persuasion, supporting the notion that affective-based attitudes exhibit greater change when exposed to affective persuasion (Edwards, 1990).

The cognitive and affective matching effect has been examined in terms of whether a person’s attitudes were towards a certain object were affectively based or cognitively based. For example, See et al., (2008) had participants read affectively and cognitively persuasive material about smoking, after which they measured people’s Need for Affect and Need for Cognition. People high in need for affect spent more time on the affective messaging, showing a preference towards the affective messages. In the second study, participants were assessed on the need for affect and the need for cognition, then given either an affective message or cognitive message to positively persuade them about blood donation, and their attitude change was examined. The results showed that when the messaging was matched to the participant’s thinking style, they were more likely to change their opinions. See et al. (2008) found that the more people believed that their attitudes were based on affect, the more they would be persuaded by affective messaging.

The final way that the cognitive and affective matching effect has been researched is if the audience generally has a cognitive or affective orientation. A cognitive orientation refers to the individual’s tendency to engage in and enjoy a cognitive activity (Cacioppo & Petty, 1982). Cognitive activity involves the individual’s thought processes, including problem-solving, decision-making, and thinking with information. In contrast, affective orientation refers to the
individual’s motivation to approach or avoid situations that induce emotions (Maio & Esses, 2001). Research has found that the effectiveness of affective or cognitive arguments depends on an individual’s need for affect or need cognition scores (Haddock et al., 2008). This research demonstrates that an individual’s affective or cognitive orientation determines their susceptibility to persuasion from affect or cognitive messages.

**Current Research**

In a randomized experiment, I will test the common courtroom wisdom that emotional appeals are more persuasive than fact-based arguments. Inspired by research on personalized messaging, there may be fault in this common idea. However, I hypothesize that emotion-based arguments will be more influential than fact-based ones for more affectively oriented jurors and that fact-based arguments will be more influential than emotion-based ones for more cognitively oriented jurors. Participants will be randomly assigned to read case briefs with either cognitive or affective messaging. Then participants will be assessed on how persuaded they were by the argument and whether they are relatively cognitively oriented or relatively affectively oriented.

**Methods**

**Participants**

There were 83 participants recruited from Ball State University. 17 participants were excluded from the results because they did not finish the survey and 1 participant was excluded because they were under the age of 18. Leaving 68 participants with complete data. Sixty-one participants were recruited from the SONA pool with the incentive of class credit for participation, 6 were recruited using the Ball State University PsychInfo email list, and 1 participant was recruited using Ball State Facebook groups. The participants had to be over the age of 18 because the study is analyzing jury persuasion, and people under the age of 18 cannot
sit on a jury. The participants were aged 18 – 23, with the mean age being 19.2 years old. The majority of the participants were female (75%), then male (19.1%), non-binary/third gender (4.4%), and other (1.5%).

Materials

All the materials listed can be found in their completed form in the appendix.

Cognitive-Affective Orientation

Need for Cognition. The participants’ cognitive orientation was measured on the 18-Item Need for Cognition (NC) Scale (Cacioppo et al., 1984). The NC includes 18 questions that either indicate a need for cognition or are reversed. Each item is ranked on a Likert scale from Extremely Uncharacteristic (1) to Extremely Characteristic (5). Examples of questions positively measuring the need for cognition are “I would prefer complex to simple problems” or “I usually end up deliberating about issues even when they do not affect me personally.” Examples of questions that are reverse scored are “Thinking is not my idea of fun” or “I feel relief rather than satisfaction after completing a task that required a lot of mental effort.”

There was strong internal consistency in the 18-Item NC Scale in the present study (α = .84). Furthermore, the scale has great test-retest reliability, as demonstrated in prior research (r = .88 after seven weeks; Sadowski & Gulgoz, 1992).

Need for Affect. The participants’ affective orientation was measured on the Shortened Need for Affect (NA) Questionnaire (Appel et al., 2012). The NA Questionnaire includes ten questions that measure both the approach and avoidance of emotions. Each item is ranked on a Likert scale from Strongly Disagree (1) to Strongly Agree (5). Examples of questions to measure approaching emotions include “I feel that I need to experience strong emotions regularly” or “It is important for me to be in touch with my feelings.” Examples of questions to measure avoiding
emotions include “I find strong emotions overwhelming and therefore try to avoid them” or “Emotions are dangerous – they tend to get me into situations that I would rather avoid.” The questions about avoiding emotions are reverse scored. The NA Questionnaire had good internal consistency in the current study (α = .833)

**Orientation.** The information from the NC Scale and NA Questionnaire were utilized to assess if the participants have a relatively cognitive or affective orientation. The participant’s scores from the NC were subtracted from their NA scores. This allowed us to see if the participant had a relatively cognitive orientation or a relatively affective orientation. The median score was .511, so that was where the group was cut to make even orientation groups. Everyone scoring below the median were grouped together as people who were relatively cognitively oriented and those scoring above the median were grouped together as people who were affectively oriented.

**Independent Variable**

The participants were presented with a case brief about a disappearance case. The case covers the disappearance of a woman whose husband is now being charged with her murder. The case briefs have been created independently of this research that was inspired by true crime cases such as the disappearance of Suzanne Morphew (Rae, 2021). The participants were made aware that the case is not true in the instructions. The two case briefs were identical, except there was one manipulated paragraph that includes either cognitive messaging or affective messaging about the defendant’s guilt. The cognitive messaging includes expert information about the defendant’s phone records and the psychological profiles of the people in the case. This information is cognitive messaging of using factual evidence to persuade the jury the defendant is guilty. The affective messaging includes testimony from the victim’s friends and family in which they
discuss their feelings about the crime. This is affective messaging, using emotional stories to persuade the jury the defendant is guilty.

**Dependent Variables**

**Perceived Guilt.** The participants were given a survey to rate their opinions about the materials they have read. The main question of this survey is to determine how confidently the participant would be in delivering a guilty verdict. The guilty verdict and confidence in that verdict were measured on a 6-point scale from 1 (“very confident that B.M. is Guilty”) to 6 (“very confident that B.M. is Innocent”).

**Evaluation of Arguments.** The participants provided their overall evaluations of how well the attorneys made their case by answering three questions. The participants were asked about how persuasive, convincing, and effective the attorneys’ arguments were, with responses provided on 5-point scales (e.g., “not at all effective” to “extremely effective”).

**Manipulation Checks.** To see if the messaging was perceived as cognitive, the participants were asked to what extent the attorneys presented a rational, fact-based argument on a 5-point scale (e.g., “not at all” to “extremely”). To see if the messaging was perceived as affective, the participants were asked to what extent the attorneys made an emotional argument on a 5-point scale (e.g., “not at all” to “extremely”).

**Reading Check.** Participants were presented with three reading comprehension questions. This is to ensure that the participants read the brief and have a basic understanding of the content. The questions cover information from the sections of the case brief all the participants received, not the manipulated messaging. Participants must get at least two of the three questions correct to pass the reading check.

**Procedures**
First, the participants were shown a consent document that will lay out the purpose and instructions for the study. Next, the participants completed both the Need for Cognition Scale and the Need for Affect Questionnaire in a randomized order for counterbalancing purposes. Then, the participants were told the purpose of the research is to study jury persuasion, specifically how personal differences may affect the persuasion of a specific juror. The instructions will tell the participants they are sitting on a mock jury for a murder trial. They will be informed that the case briefs they receive will contain all the information needed to come to a verdict. Then, the participants were presented with one of the two case briefs to read. Qualtrics randomly assigned the participants either the case brief with cognitive messaging or affective messaging. Once the participant finished reading, they went to the next screen where their verdict was recorded, along with the reliability and evaluation of the argument. After giving their opinions, the participants are directed to the reading check. Then, the participants answered questions about their demographic information. Finally, the participants submitted their answers and were thanked for their participation. If the participants are from the SONA pool, they were redirected to a new survey to record information for class credit.

Results

Descriptive Statistics

Most of the participants (60.3%) were persuaded of the guilt of the fictional defendant on some level ($M = 3.35, SD = 1.130$). Most participants selected *slightly confident the defendant is guilty* (35.3%), followed by 23.5% of participants selecting *moderately confident the defendant is guilty*, and 1.5% of participants selected *very confident the defendant is guilty*. On the other side, 19.1% of participants selected *slightly confident the defendant is innocent*, 19.1% of
participants selected *moderately confident the defendant is innocent*, and 1.5% of participants selected *very confident the defendant is innocent*.

**Manipulation Checks**

To see whether the cognitive testimony of the case brief was perceived as fact-based, perceptions were analyzed using a Univariate Analysis of Variance (2 by 2 ANOVA). There was a significant main effect of the type of testimonial argument, such that the case brief containing cognitive messaging was perceived as more fact-based ($M = 2.92, SD = .168$) than the case brief containing affective messaging ($M = 2.39, SD = .163$), $F(1, 64) = 5.09, p = .03$. However, there was not a main effect of the orientation group on the perceived fact-based content in the case brief. The case brief did not significantly differ between more cognitively oriented people ($M = 2.69, SD = .17$) and more affectively oriented people ($M = 2.62, SD = .16$) in terms of the perceived fact-based content, $F(1, 64) = .10, p = .75$. There was also no significant interaction between orientation group and the case brief presented in terms of the perceived cognitive content of the case brief, $F(1, 64) = 1.06, p = .31$.

To see whether the affective testimony of the case brief was perceived as emotion-based, perceptions were analyzed using a two-way ANOVA. There was a significant main effect of the type of testimonial argument, such that the case brief containing affective messaging was perceived as more emotional ($M = 3.89, SD = .19$) than the case brief containing cognitive messaging ($M = 2.80, SD = .19$), $F(1, 64) = 16.87, p < .001$. However, there was not a main effect of the orientation group on the perceived affective value in the case brief. The perceived affective value of the case brief did not significantly differ between the people in the cognitively oriented group ($M = 3.19, SD = .19$) and the affective oriented group ($M = 3.50, SD = .19$), $F(1, 64) = 1.34, p = .25$. There was no significant interaction between orientation group and the case
brief presented in terms of the perceived affective content of the case brief, $F(1,64) = 2.03$, $p = .16$.

**Effects on Persuasion**

To see if there was an interaction between the individuals’ orientations and the case brief in terms of the persuasiveness of the case brief, data were analyzed using a 2 by 2 between-subjects ANOVA. There was no main effect of the type of argument. The perceived persuasiveness of the case brief read did not significantly differ between case briefs containing the cognitive messaging ($M = 1.96$, $SD = .02$) and affective messaging ($M = 1.98$, $SD = .02$), $F(1, 64) = .37$, $p = .55$. There also was no main effect of the orientation group on the perceived persuasiveness of the case brief read. The perceive persuasiveness of the case brief read did not significantly differ based on if the participant was in the cognitive orientation group ($M = 1.98$, $SD = .02$) or the affective orientation group ($M = 1.96$, $SD = .02$), $F(1, 64) = .28$, $p = .60$. There was no significant interaction between orientation group and the case brief presented in terms of the persuasiveness of the case brief $F(1,64) = .03$, $p = .87$.

Beyond testing people’s perceptions of the persuasiveness of the case brief, I also tested the effect on the verdict rendered in term of the perceived guilt of the defendant. To see if there was an interaction between the orientation and case brief on the participants’ verdicts, I conducted another two-way ANOVA. Higher valued on the outcome measure reflect greater confidence in the defendant’s guilt; the case for his guilt was made using either affective or cognitive arguments in the case brief, so higher values reflect greater persuasion by the key aspect of the summary. There was no main effect of the condition on the verdict of perceived guilt render by the participant. There was no significant difference in the verdict ranking depending on whether the participants read the case brief with cognitive messaging ($M = 3.60$,
SD = .20) and the case brief with affective messaging \((M = 3.22, SD = .20)\), \(F(1, 64) = 1.80, p = .18\). There was also no main effect of the orientation group on the verdict of perceived guilt rendered by the participant, such that cognitively oriented participants \((M = 3.53, SD = .20)\) and affectively oriented participants \((M = 3.30, SD = .20)\) came to similar determination on the verdict, \(F(1, 64) = .66, p = .42\). There was no significant interaction between orientation group and the case brief presented in terms of the verdict of the case \(F(1,64) = 2.02, p = .16\). The hypothesis that emotion-based arguments will be more influential than fact-based ones for more affectively oriented jurors and that fact-based arguments will be more influential than emotion-based ones for more cognitively oriented jurors was not supported in this experiment. See Figure 1.

Figure 1

Discussion

Although the manipulation of the case brief was successful in that people saw emotional content in the case brief containing affective messaging and logical content in the case brief
containing cognitive messaging, there was no evidence that either the emotional or factually perceived case briefs were more persuasive than each other. That is, the legal perspective that emotional arguments are more persuasive to juries was not supported by the evidence.

However, there was also no evidence of a personalized matching effect. That is, I hypothesized that people who are more affectively oriented are more persuaded by a case including emotional arguments, while people who are more cognitively oriented are more persuaded by a case including fact-based arguments, but this hypothesis was not supported by the evidence.

**Limitations**

**Sample Size**

The sample size for this research was only 68 participants. The cognitive messaging was shown to 33 participants and the affective messaging was shown to 35 participants. The small number of participants did not provide enough statistical power to find subtle effects, which may explain why there was no interaction. More research with a larger sample size is needed to assess if personalized matching effects are applicable to jury persuasion.

**Hypothetical Nature**

This research was conducted online. This means that there was no defendant present and no attorney presenting evidence. The hypothetical nature of this research study takes the high stakes off the participants that a true juror would feel. This means that the participants may have lacked investment in the case and were not paying enough attention to the case brief.

Furthermore, the hypothetical nature of the case may have made the case briefs confusing. The redacted names and shortened nature of the case briefs could have caused the participants to be confused due to the holes in the story or lack of evidence for either side.
**Typo in the Scales**

In the Need for Cognition scale there were a few typos. This led to some confusion for the participants. This may have caused the orientation scales to be slightly off for some of the participants resulting in no significant interaction being found.

**Future Research**

Due to the limitations of this study, more research is necessary on the application of the cognitive and affect matching effect on jury persuasion. Specifically, as is seen in Figure 1, the graph is showing a difference such that people in the cognitive orientation group were more persuaded by the case brief containing the cognitive messaging compared to the affective orientation group. Since, the trend is apparent, there may have simply been a lack of statistical power that contributed to the lack of significant findings. Therefore, future research should continue to search for the effectiveness of personalized matching in jury persuasion. Specifically, the research should include more participants to increase the statistical power and should look more at group persuasion compared to individual persuasion.
References


## Appendix

### 18-Item Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Extremely Uncharacteristic</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Extremely Characteristic</th>
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<tbody>
<tr>
<td>(1)</td>
<td>I would prefer complex to simple problems.</td>
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<td>(2)</td>
<td>I like to have the responsibility of handling a situation that requires a lot of thinking.</td>
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<td>(3)</td>
<td>Thinking is not my idea of fun.</td>
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<td>(4)</td>
<td>I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.</td>
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<td>(5)</td>
<td>I try to anticipate and avoid situations where there is likely chance I will have to think in depth about something.</td>
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<td>(6)</td>
<td>I find satisfaction in deliberating hard and long for hours.</td>
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<td>(7)</td>
<td>I only think as hard as I have to.</td>
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<td>(8)</td>
<td>I prefer to think about small, daily projects to long-term ones.</td>
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<td>(9)</td>
<td>I like tasks that require little thought once I’ve learned them.</td>
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<td>(10)</td>
<td>The idea of relying on thought to make my way to the top appeals to me.</td>
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<td>(11)</td>
<td>I really enjoy a task that involves coming up with new solutions to problems.</td>
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<td>(12)</td>
<td>Learning new ways to think doesn’t excite me very much.</td>
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<td>(13)</td>
<td>I prefer my life to be filled with puzzles that I must solve.</td>
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<td>(14)</td>
<td>The notion of thinking abstractly is appealing to me.</td>
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<td>(15)</td>
<td>I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.</td>
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<td>(16)</td>
<td>I feel relief rather than satisfaction after completing a task that required a lot of mental effort.</td>
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<td>(17)</td>
<td>It’s enough for me that something gets the job done; I don’t care how or why it works.</td>
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<td>4</td>
<td>5</td>
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<td>(18)</td>
<td>I usually end up deliberating about issues even when they do not affect me personally.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items 3, 4, 5, 7, 8, 9, 12, 16, 17 are reverse scored.
<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>I feel that I need to experience strong emotions regularly.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(2)</td>
<td>Emotions help people to get along in life.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(3)</td>
<td>I think that it is important to explore my feelings.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(4)</td>
<td>It is important for me to be in touch with my feelings</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(5)</td>
<td>It is important for me to know how others are feeling.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(6)</td>
<td>If I reflect on my past, I see that I tend to be afraid of feeling emotions.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(7)</td>
<td>I find strong emotions overwhelming and therefore try to avoid them.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(8)</td>
<td>I would prefer not to experience either the lows or highs of emotion.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(9)</td>
<td>I do not know how to handle my emotions, so I avoid them.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(10)</td>
<td>Emotions are dangerous – they tend to get me into situations that I would rather avoid.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Items 6, 7, 8, 9, 10 are reverse scored.
Cognitive Messaging

State of Indiana vs. B. M.

Case Number: XXXX-XXXX-XX-XXXXXX

On May 10th, 2020, a blue bike was found on the side of the highway at 3:00 pm. The bike was found propped up against the guard rail with no people or footprints in sight. Soon it was revealed the bike belonged to 45-year-old S. M., whom no one had had contact with since 8:00 am that morning. S.M.’s phone was found near the bike, and no money or cards were missing from the house. The police quickly gathered evidence by questioning witnesses and using phone data. It was revealed that S.M. and her husband, B.M., were having marital issues. B.M. also had no solid alibi from May 9th at 6:00 pm until May 10th at 2:00 pm. These are the circumstances that led to B.M. being charged with the murder of his wife, S.M.

The prosecution began their case by calling the lead detective on the case. The detective revealed the cell phone records they were able to acquire from both S.M.’s and B.M.’s phones. The location software of S.M.’s phone revealed that she left their home at around 10:00 am and had been biking for approximately one hour before arriving at the location the blue bike was found. The detective also testified to the evidence gathered from B.M.’s phone. B.M. left their house around 10:00 am as well in his car. Phone records track B.M. heading towards work, but he never seemed to make it there. B.M. made three calls to the same number, which was evident from phone records. The detective tried to call this number, but the phone number B.M. called on May 10th was disconnected. Then at approximately 11:05 am, B.M.’s phone was located in the same 5-mile radius that the blue bike was found in. Next, the prosecution called a forensic psychologist who specializes in missing person investigations. Through the psychologist’s interviews and other data collected, they concluded that S.M. was most likely deceased because
she did not exhibit any signs of planning to run away. The psychologist believes that S.M. is very family oriented, so she would not disappear without contacting anyone. Furthermore, the psychologically examined B.M. The psychologist testified that B.M. exhibited traits consistent with narcissistic personality disorder and through interviews with friends and family, concluded he could be violent if provoked. The prosecution used these facts to argue that B.M. was in the general location that S.M. went missing from and had the psychological capability of murdering her.

The Defense argues that it cannot even be determined if S.M. is dead. Given that the bike was neatly propped against the guard rail, there is no evidence she was forced to leave. S.M. may have left of her own free will. Furthermore, neither B.M.’s fingerprints, shoe prints, nor DNA were not found near the bike. Finally, B.M. consistently has maintained his innocence and has been cooperative with the police until it was clear they saw him as a suspect, not a victim. If something terrible happened to S.M., the state should have allowed her family to grieve and continue searching for her. The state should not have brought this frivolous suit against B.M.
On May 10th, 2020, a blue bike was found on the side of the highway at 3:00 pm. The bike was found propped up against the guard rail with no people or footprints in sight. Soon it was revealed the bike belonged to 45-year-old S. M., whom no one had had contact with since 8:00 am that morning. S.M.’s phone was found near the bike, and no money or cards were missing from the house. The police quickly gathered evidence by questioning witnesses and using phone data. It was revealed that S.M. and her husband, B.M., were having marital issues. B.M. also had no solid alibi from May 9th at 6:00 pm until May 10th at 2:00 pm. These are the circumstances that led to B.M. being charged with the murder of his wife, S.M.

The Prosecution began presenting their case with evidence from multiple witnesses. The first witness was S.M.’s mother. She testified to the pain that S.M.’s family is suffering from; it feels as if their happiness has been stolen by B.M. S.M.’s mother offered evidence through text messages she received from S.M. weeks prior to her disappearance. Through these texts, it is evident that S.M. and B.M. were suffering from marital issues. S.M. believed that B.M. was cheating on her but was fearful of what would happen if she left. Furthermore, S.M.’s mother revealed it was not in S.M.’s character to not call her family at least once a day. No one had had any contact with S.M. since that fateful May 10th morning. S.M.’s mother begged for justice to be served, so the family could begin mourning the loss of their beloved S.M. S.M.’s best friend, L.L., was also called to testify. She revealed S.M. was miserable in the marriage, but B.M. was controlling of her. In interactions with both S.M. and B.M., L.L. revealed he would talk for S.M. and ignore her wishes. L.L. had also seen B.M. get verbally and physically violent with people.
when he was drunk. One example was from a February when the group went out to a bar. A man hit on S.M., and this made B.M. so angry he got into a bar fight. L.L. testified that S.M. had a look of fear on her face during the entire altercation. The prosecution argued the testimonies illustrated a strenuous marriage, the possible violent nature of B.M., and the lack of an alibi made B.M. the most likely perpetrator.

The Defense argues that it cannot even be determined if S.M. is dead. Given that the bike was neatly propped against the guard rail, there is no evidence she was forced to leave. S.M. may have left of her own free will. Furthermore, neither B.M.’s fingerprints, shoe prints, nor DNA were not found near the bike. Finally, B.M. consistently has maintained his innocence and has been cooperative with the police until it was clear they saw him as a suspect, not a victim. If something terrible happened to S.M., the state should have allowed her family to grieve and continue searching for her. The state should not have brought this frivolous suit against B.M.
Dependent Measure

1. Regarding the case of the State of Indiana vs. B.M., to what extent do you find the defendant guilty of the murder of S.M.?
   1. Very confident the defendant is Guilty
   2. Moderately confident the defendant is Guilty
   3. Slightly confident the defendant is Guilty
   4. Slightly confident the defendant is Innocent
   5. Moderately confident the defendant is Innocent
   6. Very confident the defendant is Innocent
**Reliability Check**

1. How persuasive was the argument made by the prosecuting attorney that B.M. murdered S.M.?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

2. How convincing did you think the message that B.M. murdered S.M. from the prosecuting attorney was?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

3. How effectively do you think that prosecuting attorney made their point that B.M. murdered S.M.?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tbody>
</table>

4. To what extent did the prosecuting attorney present a rational, fact-based argument?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

5. To what extent did the prosecuting attorney present an emotional argument?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Reading Check

1. Has the victim’s body been found?
   a. Yes
   b. No

2. What is the relationship between the defendant and the victim?
   a. Brother/Sister
   b. Husband/Wife
   c. Boyfriend/Girlfriend
   d. Strangers

3. Were the footprint or DNA found at the scene?
   a. Yes
   b. No
Demographic Information

1. Age
   a.

2. Gender
   a. Male
   b. Female
   c. Non-Binary
   d. Prefer not to answer

3. Race
   a. African America
   b. Asian
   c. Caucasian/White
   d. Hispanic
   e. Native American
   f. Pacific Islander
   g. Mixed Race
   h. Prefer not to answer
Instructions

You will be participating in a study about jury persuasion. For purposes of this study, you will be sitting on a mock jury. Since this is a mock jury, the case is not real, meaning none of the people or events are completely real. You will be presented with a case brief will all the evidence and information necessary to come to a decision about the case, then you will be asked for your verdict. You cannot use any outside information that you may know about the case or law in your decision, only the information presented in the case brief.
IRB Approval

Please note that Ball State University IRB has taken the following action on IRBNet:

Project Title: [1989019-1] The Role of Information Presented at Trial and Jury Decision-Making

Principal Investigator: Andrew Luttrell

Submission Type: New Project

Date Submitted: December 15, 2022

Action: APPROVED

Effective Date: January 10, 2023

Review Type: Exempt Review

Should you have any questions you may contact Sena Lim at slim2@bsu.edu.

Thank you,

The IRBNet Support Team