



DATE DOWNLOADED: Sun Dec 17 21:02:10 2023

SOURCE: Content Downloaded from [HeinOnline](#)

Citations:

Please note: citations are provided as a general guideline. Users should consult their preferred citation format's style manual for proper citation formatting.

Bluebook 21st ed.

Barbara O'Brien & Daphna Oyserman, *It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making*, 92 MARQ. L. REV. 149 (2008).

ALWD 7th ed.

Barbara O'Brien & Daphna Oyserman, *It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making*, 92 Marq. L. Rev. 149 (2008).

APA 7th ed.

O'Brien, Barbara, & Oyserman, Daphna. (2008). *It's not just what you think, but also how you think about it: the effect of situationally primed mindsets on legal judgments and decision making*. *Marquette Law Review*, 92(1), 149-172.

Chicago 17th ed.

Barbara O'Brien; Daphna Oyserman, "It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making," *Marquette Law Review* 92, no. 1 (Fall 2008): 149-172

McGill Guide 9th ed.

Barbara O'Brien & Daphna Oyserman, "It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making" (2008) 92:1 Marq L Rev 149.

AGLC 4th ed.

Barbara O'Brien and Daphna Oyserman, 'It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making' (2008) 92(1) *Marquette Law Review* 149

MLA 9th ed.

O'Brien, Barbara, and Daphna Oyserman. "It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making." *Marquette Law Review*, vol. 92, no. 1, Fall 2008, pp. 149-172. HeinOnline.

OSCOLA 4th ed.

Barbara O'Brien & Daphna Oyserman, 'It's Not Just What You Think, but also How You Think about It: The Effect of Situationally Primed Mindsets on Legal Judgments and Decision Making' (2008) 92 Marq L Rev 149 Please note: citations are provided as a general guideline. Users should consult their preferred citation format's style manual for proper citation formatting.

Provided by:

USC Law Library

# IT'S NOT JUST WHAT YOU THINK, BUT ALSO HOW YOU THINK ABOUT IT: THE EFFECT OF SITUATIONALLY PRIMED MINDSETS ON LEGAL JUDGMENTS AND DECISION MAKING

BARBARA O'BRIEN\*

DAPHNA OYSERMAN\*\*

## TABLE OF CONTENTS

I.	INTRODUCTION .....	150
II.	PSYCHOLOGICAL RESEARCH ON PRIMING .....	151
III.	EMPIRICAL EVIDENCE OF MINDSET PRIMING ON LEGAL DECISION MAKING*** .....	157
	<i>A. Participants and Procedure</i> .....	158
	<i>B. Measures</i> .....	159
	<i>C. Results and Discussion</i> .....	160
IV.	IMPLICATIONS OF MINDSET PRIMING FOR POLICY AND LEGAL DECISION MAKING .....	162
	<i>A. Achieve Success Versus Avoid Failure and Burdens of Proof</i> .....	162
	<i>B. Counterfactual Mindset and Consideration of Alternatives</i> ...	164
	<i>C. Perceived Power</i> .....	166
	<i>D. Deliberative-Implementation Mindset and Criminal Investigations</i> .....	167
	<i>E. Mindset Fit and Persuasion</i> .....	169
V.	CONCLUSION.....	169
	APPENDIX 1.....	170
	APPENDIX 2.....	172

---

\* Assistant Professor of Law, Michigan State University College of Law.

\*\* University of Michigan Professor of Psychology, Edwin J. Thomas Collegiate Professor of Social Work and Research Professor, Institute for Social Research.

\*\*\* Funding for these studies was provided by the Michigan Prevention Research Training Grant (NIH grant number T32 MH63057). The first author also received support from the Michigan State University College of Law.

## I. INTRODUCTION

The law presents many occasions in which an individual's unique constellation of traits and attitudes is expected to matter. Take, for instance, the art of jury selection. Trial lawyers understand that different people often interpret the same evidence differently. Conventional wisdom holds that people with certain characteristics have certain attitudes and that these attitudes affect their perceptions of a case. The jury selection process allows lawyers to identify those characteristics and thus reject potential jurors who they believe are least likely to favor their client. Many lawyers therefore regard picking a jury as the most important step to winning a trial.<sup>1</sup> But despite the emphasis on picking the right person for the jury, evidence supporting the conventional wisdom that a skilled attorney—or even professional jury consultants—can identify jurors who are likely to favor their clients is spotty at best.<sup>2</sup>

Similarly, lawyers understand that calling forth certain concepts and imagery can frame evidence in a way that affects how it is interpreted. Courts forbid a prosecutor from comparing a criminal defendant to Saddam Hussein or Adolf Hitler, for example, because it evokes passions and prejudices.<sup>3</sup> Essentially, a lawyer who uses such a rhetorical device seeks to activate a particular set of knowledge structures and beliefs to influence the sense jurors make of the defendant's actions, motives, and beliefs, a phenomenon that psychologists call "priming."<sup>4</sup> Even the most despicable defendant

---

1. Nancy S. Marder, *Justice Stevens, the Peremptory Challenge, and the Jury*, 74 *FORDHAM L. REV.* 1683, 1685 (2006) (noting that trial lawyers "view jury selection as one key to winning their trial"); James W. Mehaffy, *A Few Tips on Jury Selection: A View from the Bench*, 63 *TEX. B.J.* 878, 878 (2000) (arguing that the best trial "lawyers understand that, above all, jury selection is the most important part of the whole process").

2. See JOEL D. LIEBERMAN & BRUCE SALES, *SCIENTIFIC JURY SELECTION* 77–78, 99 (2007).

3. See, e.g., *United States v. Nelson*, 1 M.J. 235, 238, 240 (C.M.A. 1975) (comparing defense witness to Hitler was "inflammatory"); *Harris v. People*, 888 P.2d 259, 265 (Colo. 1995) (reversing conviction where prosecutor analogized defendant to Saddam Hussein because comparison encouraged jurors to "employ their patriotic passions" and brought to mind an image of "a bully"); *People v. Deasee*, 23 Cal. Rptr. 2d 505, 507, 508 (Cal. Ct. App. 1993) (reversing conviction where prosecutor referred to notorious mass killings during argument); *Wright v. State*, 609 S.W.2d 801, 804 (Tex. Crim. App. 1980) (reversing conviction where prosecutor compared defendant to Jack the Ripper and the Boston Strangler).

4. John A. Bargh & Tanya L. Chartrand, *The Mind in the Middle: A Practical Guide to Priming and Automaticity Research*, in *HANDBOOK OF RESEARCH METHODS IN SOCIAL*

should compare favorably to notoriously evil historical figures, but the technique can work to a prosecutor's advantage when it succeeds in reminding jurors both that evil exists and that people—including this defendant—are capable of monstrous acts.

Thus, it makes sense that lawyers are concerned with individual differences among jurors and with semantic priming of the jury as a whole, even if lawyers use different language to describe these concepts. But another less intuitive psychological phenomenon also bears on legal decision making—mindset. Put simply, a mindset is a way of making sense of the world. Specific situational cues make salient not only relevant knowledge and belief structures but also congruent ways of thinking. As we describe below, the mindset primed in the moment can have an important influence on how jurors make sense of the evidence. Understanding how mindset priming works makes clear that what matters is not only what people think, but also how they think about it.

In this Article, we discuss the relevance of mindset priming for various types of legal judgments and decision making. In Part II, we distinguish mindset from semantic priming and review the psychological research on mindset priming in non-legal settings. In Part III, we present the results of two studies showing that priming different mindsets alters attitudes about legal issues. In Part IV, we discuss the implications of these findings for other legally relevant situations and propose further research.

## II. PSYCHOLOGICAL RESEARCH ON PRIMING

Psychologists have repeatedly shown that activating or “priming” a knowledge structure in one context can influence judgments in a separate, unrelated context.<sup>5</sup> Once activated, a knowledge structure can affect how one interprets subsequent ambiguous events to which the primed construct relates.<sup>6</sup> Conceptual priming involves activating concepts or mental representations such as traits, values, norms, or goals that then serve as interpretive frames in the processing of subsequent

---

AND PERSONALITY PSYCHOLOGY 253, 259 (Harry T. Reis & Charles M. Judd eds., 2000).

5. *Id.* at 258. For a review of research on semantic priming, see generally Jens Förster & Nira Liberman, *Knowledge Activation*, in *SOCIAL PSYCHOLOGY: HANDBOOK OF BASIC PRINCIPLES* 201 (Arie W. Kruglanski & E. Tory Higgins eds., 2d ed. 2007).

6. Bargh & Chartrand, *supra* note 4, at 258.

information.<sup>7</sup> Once a concept is primed, other concepts associated with it in memory are also activated.<sup>8</sup>

Psychologists have most typically demonstrated this phenomenon using an unrelated-studies paradigm, in which the experimenter primes a concept in “Study 1” and then assesses study participants’ impressions in a separate and ostensibly unrelated “Study 2.”<sup>9</sup> For instance, in one classic study, researchers exposed participants to words relating either to the trait of adventurousness or to the trait of recklessness.<sup>10</sup> Later, in what the experimenter told them was a separate study measuring reading comprehension, participants read a story in which the protagonist acted ambiguously with regard to the primed trait, making it possible to interpret the described behavior either as adventurous or reckless.<sup>11</sup> Participants who had been exposed to words related to recklessness in the first task were more likely to characterize the protagonist’s behavior as reckless, and those exposed to words related to adventurousness interpreted the very same behavior as adventurous.<sup>12</sup> Thus, priming concepts associated with certain personality traits brought related concepts to mind when people were faced with new information.

While content priming activates a concept or meaning structure, cognitive-style or mindset priming activates a way of thinking or mental procedure.<sup>13</sup> Mindsets can be thought of as a procedural toolkit used to structure thinking. They tell us how to think and provide ways of reasoning about the world. Mindsets—also called heuristics or naïve theories—tell us how to process information to make sense of

---

7. *Id.*

8. *Id.*

9. *See id.* at 259 (reviewing the studies).

10. E. Tory Higgins et al., *Category Accessibility and Impression Formation*, 13 J. EXPERIMENTAL SOC. PSYCHOL. 141, 143 (1977). For discussion of similar experiments showing how semantic priming can affect how people perceive others, see Thomas K. Srull & Robert S. Wyer, Jr., *The Role of Category Accessibility in the Interpretation of Information About Persons: Some Determinants and Implications*, 37 J. PERSONALITY & SOC. PSYCHOL. 1660, 1660 (1979) (priming traits of hostility or kindness affected how study participants judged the protagonist in a story).

11. *See Higgins et al., supra* note 10, at 146–48.

12. *Id.*

13. Bargh & Chartrand, *supra* note 4, at 265.

experience.<sup>14</sup> When a particular mindset is primed, these previously stored mental procedures can carry over to a subsequent task.<sup>15</sup>

One set of fundamental and particularly well-researched mindsets concerns approaching positive outcomes and avoiding negative ones. The behavioral activation-behavioral inhibition system can be seen as the most basic conceptualization of this mindset.<sup>16</sup> The behavioral activation system activates in response to opportunities for rewards (such as sex, food, achievement, and success) and evokes reward-focused action.<sup>17</sup> In contrast, the behavioral inhibition system activates in response to threat (such as punishment, pain, failure, and loss) and evokes vigilance to avoid harm.<sup>18</sup> Behavioral inhibition is not the reverse of behavioral activation; rather, these systems are independent in the goals they implicate and mechanisms they activate.<sup>19</sup> The focus one takes depends on whether attaining goals or avoiding problems is the relevant goal in the situation; it clearly is adaptive to be sensitive to situational cues as to which is appropriate in the moment.<sup>20</sup> Action is appropriate when there is the possibility of a reward and the potential benefits of action outweigh potential costs.<sup>21</sup> Conversely, inaction is appropriate when threat must be avoided and potential costs of taking the wrong action outweigh its potential benefits.<sup>22</sup>

Behavioral inhibition can be thought about as a sort of automatic or pre-conscious vigilance, in which environmental cues set the course of ensuing information processing.<sup>23</sup> Detecting threatening information tunes attention, perception, judgment, and memory toward outcomes

---

14. Norbert Schwarz, *Situated Cognition and the Wisdom of Feelings: Cognitive Tuning*, in *THE WISDOM IN FEELING: PSYCHOLOGICAL PROCESSES IN EMOTIONAL INTELLIGENCE* 144, 147 (Lisa Feldman Barrett & Peter Salovey eds., 2002).

15. Bargh & Chartrand, *supra* note 4, at 266; *see also* Jonathan W. Schooler, *Verbalization Produces a Transfer Inappropriate Processing Shift*, 16 *APPLIED COGNITIVE PSYCHOL.* 989, 989–91 (2002).

16. *See* Charles S. Carver & Teri L. White, *Behavioral Inhibition, Behavioral Activation, and Affective Responses to Impending Reward and Punishment: The BIS/BAS Scales*, 67 *J. PERSONALITY & SOC. PSYCHOL.* 319, 319 (1994).

17. *See id.*; Jeffrey A. Gray, *Brain Systems that Mediate both Emotion and Cognition*, 4 *COGNITION & EMOTION* 269, 278 (1990); E. Tory Higgins, *Beyond Pleasure and Pain*, 52 *AM. PSYCHOL.* 1280, 1281 (1997).

18. Carver & White, *supra* note 16, at 319; Higgins, *supra* note 17, at 1293.

19. Carver & White, *supra* note 16, at 319–20.

20. Higgins, *supra* note 17, at 1284–85.

21. *Id.*

22. *Id.*

23. Randy J. Larsen, *Emotion and Cognition: The Case of Automatic Vigilance*, *PSYCHOL. SCI. AGENDA*, Nov. 2004, at 5, 5.

relevant to a threat.<sup>24</sup> Detecting a threat means that all is not well; one should proceed with care until assured that the threat is resolved. The automatic vigilance system accomplishes this by directing cognitive resources toward potentially threatening information.<sup>25</sup> Threat does not freeze action but rather redirects focus toward reducing harm. When the threat subsides, behavioral activation recurs—one can resume focus on achieving positive outcomes or rewards without attending to the possibility of things going wrong.

Researchers have applied their understanding of these systems to the domain of goal pursuit. When all is well, one can focus on pursuing goals; when there is the possibility for harm or costly error, one must instead focus on avoiding harm. This insight informs several lines of research on mindset. For instance, self-regulatory focus theory posits that people pursue goals with either a promotion or prevention mindset.<sup>26</sup> Someone with a promotion-focused mindset pursues goals with an emphasis on achieving ideals and attaining success, while someone with a prevention-focused mindset is concerned with avoiding failure and satisfying duties.<sup>27</sup> The promotion-focused person is less concerned with immediate threats to safety and can therefore process information more heuristically, with less attention to detail than the prevention-focused person, who must attend more closely to the environment to resolve potential threats.

Different moods operate in much the same way. A positive mood signals that all is well and cues less effortful, heuristic processing; in contrast, a negative mood signals that something in the current situation is not right and cues more effortful, systematic processing to detect and fix the problem.<sup>28</sup> Inducing a particular mood therefore not only affects how people feel, but also primes them to process information in a particular way. For instance, mood can influence moral judgment. One researcher has shown that people in a positive mood tend to make more

---

24. *Id.* at 7.

25. *Id.* at 5.

26. See Higgins, *supra* note 17, at 1281.

27. See *id.* at 1281–82.

28. Karen Gasper & Gerald L. Clore, *Attending to the Big Picture: Mood and Global Versus Local Processing of Visual Information*, 13 *PSYCHOL. SCI.* 34, 39 (2002); Norbert Schwarz & Gerald L. Clore, *Feelings and Phenomenal Experiences*, in *SOCIAL PSYCHOLOGY: HANDBOOK OF BASIC PRINCIPLES* 433, 436 (E. Tory Higgins & Arie W. Kruglanski eds., 1996).

superficial evaluations of someone engaged in morally questionable behavior.<sup>29</sup>

Psychologists have gone beyond approach-avoid-based mindsets to explore a variety of other mindsets and their influence on cognitive processing. In one study, experimenters gave participants instructions designed to cue either deliberative or implementation mindsets.<sup>30</sup> A deliberative mindset involves weighing the pros and cons of taking action, while an implementation mindset involves planning how one will implement a project once a decision to take action has been made.<sup>31</sup> After receiving the instructions, participants completed unfinished fairy tales in what they were told was a second, unrelated experiment.<sup>32</sup> Participants primed with a deliberative mindset tended to complete the story with characters contemplating their next steps or seeking advice.<sup>33</sup> Participants primed with implementation mindsets, in contrast, wrote about characters who immediately took action without further reflection.<sup>34</sup>

Other researchers have found that people can be primed to think more readily about ways in which a situation might have turned out differently.<sup>35</sup> Study participants who were exposed to a situation in which an alternative outcome almost happened engaged in more mental simulations when faced with a new, unrelated situation.<sup>36</sup> That is, thinking about how a situation might have turned out differently in one context makes people more likely to consider alternatives in another, a phenomenon that psychologists call counterfactual thinking.<sup>37</sup>

---

29. Jeremy A. Blumenthal, *Does Mood Influence Moral Judgment? An Empirical Test with Legal and Policy Implications*, 29 LAW & PSYCHOL. REV. 1, 16 (2005).

30. Peter M. Gollwitzer et al., *Deliberative and Implemental Mind-Sets: Cognitive Tuning Toward Congruous Thoughts and Information*, 59 J. PERSONALITY & SOC. PSYCHOL. 1119, 1120 (1990).

31. *Id.*

32. *Id.*

33. *See id.* at 1122.

34. *See id.*

35. Adam D. Galinsky et al., *Counterfactuals as Self-Generated Primes: The Effects of Prior Counterfactual Activation on Person Perception Judgments*, 18 SOC. COGNITION 252, 273 (2000); *see also* Kai Sassenberg & Gordon B. Moskowitz, *Don't Stereotype, Think Different! Overcoming Automatic Stereotype Activation by Mindset Priming*, 41 J. EXPERIMENTAL SOC. PSYCHOL. 506, 511 (2005) (“[I]ndividuals possess [sic] a cognitive procedure allowing to exert control over automatic stereotype activation. This procedure can be activated by priming a creative mindset.”).

36. Galinsky et al., *supra* note 35, at 252.

37. *Id.* at 253–54.



Mindset can also affect whether a person processes information concretely or abstractly. For instance, distance—both physical and temporal—provides cues about the appropriate level of processing of information.<sup>38</sup> People tend to process distant objects and events abstractly—extracting the gist of a set of data to understand its fundamental qualities and the interrelations among the parts.<sup>39</sup> In contrast, they process proximate objects and events more concretely, with greater attention to detail and information specific to that particular situation.<sup>40</sup> Importantly, abstract versus concrete reasoning relates to psychological distance. That is, psychologically meaningful events feel nearer.<sup>41</sup> When the subject matter of a case is personalized, decision makers feel it could have happened to them; they may then reason more concretely about the evidence, taking details into account. Conversely, they may be more likely to process information in a global way when the case feels distant.<sup>42</sup>

Perceived power has a similar effect.<sup>43</sup> A perception that one has little power prompts local or more concrete processing; a perception that one has substantial power cues “big picture” thinking.<sup>44</sup> Similarly, the focus one takes in approaching a goal—either achieving positive outcomes or avoiding negative ones—triggers a particular level of processing.<sup>45</sup> A success-oriented promotion focus cues abstract processing, while a failure-avoiding prevention focus elicits concrete processing.<sup>46</sup>

These studies address different psychological processes, but they illustrate an important general principle: it is possible to prime not only

---

38. Nira Liberman et al., *The Effect of Temporal Distance on Level of Mental Construal*, 38 J. EXPERIMENTAL SOC. PSYCHOL. 523, 523–24 (2002).

39. *Id.* at 524.

40. *Id.*; see also Lera Boroditsky, *Metaphoric Structuring: Understanding Time Through Spatial Metaphors*, 75 COGNITION 1, 1 (2000); Yaacov Trope & Nira Liberman, *Temporal Construal*, 110 PSYCHOL. REV. 403, 403, 418 (2003).

41. See Liberman et al., *supra* note 38, at 523–24; see also Boroditsky, *supra* note 40, at 1; Trope & Liberman, *supra* note 40, at 403, 418.

42. Liberman et al., *supra* note 38, at 523–24; see Boroditsky, *supra* note 40, at 1; Trope & Liberman, *supra* note 40, at 403, 418.

43. Dacher Keltner et al., *Power, Approach, and Inhibition*, 110 PSYCHOL. REV. 265, 265 (2003); Pamela K. Smith & Yaacov Trope, *You Focus on the Forest When You're in Charge of the Trees: Power Priming and Abstract Information Processing*, 90 J. PERSONALITY & SOC. PSYCHOL. 578, 578 (2006).

44. Smith & Trope, *supra* note 43, at 578.

45. Jens Förster & E. Tory Higgins, *How Global Versus Local Perception Fits Regulatory Focus*, 16 PSYCHOL. SCI. 631, 631 (2005).

46. *Id.*

the substance of thought but also its form.<sup>47</sup> In all of these studies, participants were primed not with a particular idea, but with a way of approaching a task, which affected how they made sense of the world more generally.<sup>48</sup> Taken together, this literature suggests that situational cues can make salient particular cognitive processes, which are then likely to spill over to govern subsequent tasks.

Psychologists' work on mindset has the potential to offer tremendous insight into legal judgments and decision making of all kinds, yet this research has not been applied to legal situations. There is every reason to think that various situational factors—such as how case materials are presented or the manner in which jurors are treated—affect the mindset of legal decision makers. Indeed, applying what psychologists have learned about mindset may clarify otherwise opaque judgment and decision-making processes, such as when two judges see the same legal issue differently or a jury reaches a decision that appears contrary to observers' assessment of the evidence. In the next section, we begin to apply this knowledge to the domain of legal judgments and decision making, presenting the results of two studies that demonstrate how priming mindset influences judgments about criminal justice policy.

### III. EMPIRICAL EVIDENCE OF MINDSET PRIMING ON LEGAL DECISION MAKING

In two studies, we examined how priming a mindset focused on either achieving success or avoiding failure influenced legally relevant judgments. Both studies were approved by the University of Michigan's Institutional Review Board and conformed to the ethical standards established by the psychological research community. We provided informed consent to study participants, randomly assigned them to experimental conditions, and thoroughly debriefed them after the study.

We applied research about mindsets focused on achieving success and avoiding failure to examine how activating these systems affects

---

47. In addition to semantic and mindset priming, goal priming can affect cognition and behavior. For instance, study participants performed better on an intellectual task when primed with words related to achievement. John A. Bargh et al., *The Automated Will: Nonconscious Activation and Pursuit of Behavioral Goals*, 81 J. PERSONALITY & SOC. PSYCHOL. 1014, 1014 (2001). For a review of goal-priming research, see generally Jens Förster et al., *Seven Principles of Goal Activation: A Systematic Approach to Distinguishing Goal Priming from Priming of Non-Goal Constructs*, 11 PERSONALITY & SOC. PSYCHOL. REV. 211 (2007).

48. See, e.g., Förster et al., *supra* note 47.

people's approach to legal issues.<sup>49</sup> Specifically, we asked participants to think about either achieving their goals or avoiding harms and then asked them to report their opinions about constitutional protections for criminal defendants (Study 1) and about proper punishments for criminals (Study 2). We hypothesized that priming a mindset focused on avoiding harm and mistakes would induce in participants a more measured and cautious approach when considering how to treat people accused of crimes compared to participants primed to think about achieving goals and success.<sup>50</sup>

### A. Participants and Procedure

In both studies, we recruited participants on the web to fill out a criminal justice system questionnaire.<sup>51</sup> They were directed to a website that explained the study and their rights and solicited participation of those over eighteen years of age. Those agreeing to participate were asked to click on a bar at the bottom of the screen. The bar-click randomly sent participants into one of three conditions. These were a no prime control and two priming conditions: an avoid failure ("avoid") condition and an achieve success ("achieve") condition. Study 1 included 82 men, 101 women, and 6 participants who declined to indicate gender;<sup>52</sup> Study 2 included 70 men, 161 women, and 2 participants who declined to indicate gender.<sup>53</sup>

---

49. See discussion *supra* Part II.

50. See discussion *infra* Part III.A for further explanation.

51. We posted invitations to participate in a web-based study about the criminal justice system on many sites; according to a participant report in Study 1, the participants came from psychological research (32.8%), current events (30.7%), hobby or other interests (6.3%), women's magazines (4.8%), and other (25.4%) portals or online forums. In Study 2, participants reported coming from psychological research (42.9%), current events (10.3%), hobbies or other interest (7.3%), women's magazines (5.2%), and other (33.5%) portals or online forums.

52. Study 1 participants identified themselves mostly as white (76.2%, then about 5% each, African American, Latino, and declined to report), Christian (57.7%, then 19.6% no religion, 14.3% "other" religion, and 6.9% declined to report), young adults (48.1% 18–25,  $M = 29.6$ ,  $SD = 11.29$ ). They rated themselves politically conservative (17.5%), moderate (30.7%), liberal (24.4%) or other (27.5%, including socially liberal but fiscally conservative (2.6%), civil libertarian (4.8%), not interested in politics (15.3%), and declined to report (4.8%). Our sample thus included a wider age range, more males, and a somewhat more racially diverse composition than the student-based sample that is the norm in psychological research. Samuel D. Gosling et al., *Should We Trust Web-Based Studies? A Comparative Analysis of Six Preconceptions About Internet Questionnaires*, 59 AM. PSYCHOL. 93, 97 (2004).

53. Study 2 participants were mostly white (77.3%; 5.6% African American, 5.6% multicultural, 3.9% Latino), Christian (57.1%; 24.5% no religion, 10.3% "other" religion);

To prime mindset, we asked participants to read from a list of actions with accompanying photographs that reflected either taking steps toward achieving a goal (in the achieve condition) or steps toward preventing harm (in the avoid condition), and to select those actions that they had taken recently.<sup>54</sup> In the no-prime control condition, we simply omitted the priming task. After completing the priming task, participants answered questions about the criminal justice system, followed by questions about demographic characteristics and debriefing information.

### B. Measures

In Study 1, we presented participants with five questions about their opinions of the appropriate level of rights to afford criminal defendants.<sup>55</sup> We based these items on those used in national opinion

young adults ( $M = 28.39$ ,  $SD = 9.17$ ), with political orientation of conservative (18.5%), moderate (25.3%), liberal (33.5%), and other (22.8%: socially liberal but fiscally conservative, 5.6%, civil libertarian, 3.9%, not interested in politics, 9.9%, declined to answer, 3.4%). Gender and racial composition of this web-based sample was comparable to traditional samples examined by Gosling et al., *supra* note 52.

54. In the avoid condition, participants read and selected options from the following:

Americans know that sometimes an ounce of prevention is worth a pound of cure: Simple measures can save lives. Which of these measures have you taken to ensure the safety and security of yourself and your loved ones? Choose as many as apply from the following: (1) Gotten a vaccination; (2) Worn a safety belt while traveling in a car; (3) Taken steps, such as washing your hands, to avoid the spread of dangerous bacteria; and (4) Worn a helmet or taken other precautions in leisure activities.

Each measure was presented with a picture depicting the activity in the caption. Participants were then invited to “tell us about any other preventative measures you have taken that were not included in the last question.”

In the achieve condition, they read the following:

Americans pride themselves on their initiative: Sometimes you have to reach for the stars to achieve a goal. Please tell us about steps you’ve taken in your life to achieve your aspirations. Choose as many as apply from the following: [They were then presented four captioned picture icons to click on] (1) Taken on a challenge because it was what you wanted to do; (2) Worked hard to achieve your ambitions at work; (3) Taken a chance to achieve your dreams; and (4) Lived life for the moment.

Each picture was presented with a picture depicting the activity in the caption. They were then invited to “tell us about any other measures you have taken to achieve your aspirations that were not included in the last question.”

55. See Appendix 1 for all items.

polls. For instance, we asked them how they felt about imposing a moratorium on the death penalty, and whether people accused of crimes enjoyed too many or too few rights. Some items had three response choices and others had four, depending on the nature of the question. We also tailored the scale of the responses to the questions (e.g., too many rights to too few rights, strongly support to strongly oppose). We reverse coded as necessary so that higher responses always represented greater endorsement of defendants' rights, standardized the responses, and calculated the mean of all items.<sup>56</sup> The final score represented a general affinity for defendants' rights, with higher numbers indicating greater support.

In Study 2, we asked participants about the appropriate punishment for various crimes, again modeling the questions on those used in public opinion polls.<sup>57</sup> For instance, participants indicated what they felt was the right punishment for murder and whether they approved of the extent to which the criminal justice system punished violent offenders. Responses varied by question. We reverse scored as necessary, standardized responses, and took a mean to create a single score in which higher values reflected endorsement of harsher punishment.<sup>58</sup>

### *C. Results and Discussion*

In neither study did participants' responses vary based on their gender, race, or religion; however, political affiliation did matter. That is, those who identified themselves as politically conservative favored granting fewer rights to criminal defendants compared to other respondents<sup>59</sup> and supported harsher punishments for criminals.<sup>60</sup> Because conservatism bears on people's views of these issues, we tested the effect of priming in both studies with an Analysis of Covariance, which allowed us to control for the effect of political conservatism. As predicted, mindset mattered over and above the effect of political conservatism: compared to priming an achieve mindset, priming an avoid mindset increased affinity for rights<sup>61</sup> and softened participants' stance on appropriate punishment for criminals.<sup>62</sup>

---

56.  $M = 0$ ,  $SD = .71$  (after standardization).

57. See Appendix 2 for all items.

58.  $M = 0$ ,  $SD = .67$  (after standardization).

59.  $M = -.31$ ,  $SD = .64$  (self-identified conservatives) vs.  $M = .05$ ,  $SD = .68$  (all other respondents),  $F(1, 175) = 7.31$ ,  $p < .01$ .

60.  $M = .42$ ,  $SD = .51$  (self-identified conservatives) vs.  $M = -.08$ ,  $SD = .67$  (all other respondents),  $F(1, 226) = 22.59$ ,  $p < .001$ .

61. We tested this effect using planned contrasts between the two primed conditions,

As hypothesized, priming a mindset focused on avoiding harm increased participants' focus on protecting defendants' rights compared to priming a mindset focused on achieving success. Although conservatives (in either condition) were generally less likely to endorse defendants' rights and more willing to punish, priming had a statistically significant effect even when we controlled for conservatism. Priming to avoid harm increased the extent to which participants endorsed support for the rights of the accused; focusing on harm prevention seemed to prompt participants to consider the importance of protecting against errors of commission. In the context of opinions about the criminal justice system, that concern translates to guarding against the dangers of an overreaching state that rushes to judgment and violates civil liberties. In contrast, an achieve mindset freed participants to focus on attaining goals; the goal in the criminal justice context is to catch and punish wrongdoers, which translates into relatively less concern for avoiding mistakes.

In two studies, we primed a mindset focused on either achieving success or avoiding failure. That mindset in turn affected how those participants felt about criminal justice issues. Their personal characteristics still mattered; political conservatives, not surprisingly, favored stronger punishments and fewer protections for criminals in the first two studies. But mindset also mattered. When faced with precisely the same issues, participants responded differently depending on the mindset we had previously primed in them. Priming a mindset focused on avoiding harm and failure made participants more likely to favor protections from an overreaching state that punishes too rashly and harshly compared to participants primed with a mindset focused on achieving success.

These findings raise interesting questions that warrant further research. We primed mindset in a seemingly innocuous aside, outside the context of crime, by asking participants to report measures they have taken in their own lives either to prevent harm or to achieve their goals, using non-crime-related examples. That mindset then carried over to influence how they thought about criminal justice policy in general. But would mindset have the same effect if primed in the context of

---

which revealed a statistically significant difference, *EMM* (estimated marginal means) = -.05 (avoid) vs. -.24 (achieve),  $F(1, 175) = 5.01, p < .05$ . Estimated marginal means are presented to account for the inclusion of a covariate (political conservatism) in the analysis.

62. We tested this effect using planned contrasts between the two primed conditions, which revealed a statistically significant difference, *EMM* = -.08 (avoid) vs. .13 (achieve),  $F(1, 226) = 4.07, p < .01$ .

safety and avoiding harm related to crime? What if we asked about appropriate punishment or procedural safeguards for particular wrongdoers rather than general policy? What if we asked participants about the best way to treat an accused wrongdoer who committed a crime against a personalized other? In these cases, priming may have had different effects. Take the example of people asked to consider punishment for a personalized crime after being focused on avoiding mistakes. In this circumstance, people might become less tolerant of criminals' rights and more willing to punish criminals because they would define avoiding mistakes in terms of erroneously letting a guilty party go free rather than on avoiding mistakes in terms of erroneously punishing an accused but innocent party.

As these thought experiments suggest, priming vigilance against harm might in some cases induce a tough, law-and-order mentality. In context, primed or chronically salient mindsets are likely to affect legal judgments and decision making in complex ways—some obvious and intuitive and some less so. In the next section we consider likely consequences of mindset for legal judgments.

#### IV. IMPLICATIONS OF MINDSET PRIMING FOR POLICY AND LEGAL DECISION MAKING

In the previous section, we discussed two studies that showed that having a mindset focused either on avoiding harm or achieving success affected people's judgments about criminal justice policy. In this section we consider how those mindsets and others could affect other types of legal decision making and discuss common situations that might prime those mindsets with potentially unintended consequences.

##### *A. Achieve Success Versus Avoid Failure and Burdens of Proof*

In a separate study conducted by the authors, participants read about the police investigation of the shooting death of a convenience store clerk.<sup>63</sup> The investigation focused on a prime suspect against whom police had gathered a weak circumstantial case. Mindset was primed in the wording of the instructions. Participants were instructed either to focus on making sure the investigation succeeded or to focus on making sure it did not result in a mistake. Mindset priming (achieving success or avoiding a mistake) did not significantly affect

---

63. Barbara O'Brien & Daphna Oyserman, *The Shield of Defense or the Sword of Prosecution: How Self-Regulatory Focus Relates to Responses to Crime*, J. APPLIED SOC. PSYCHOL. (forthcoming 2009) (manuscript at 12, on file with authors).

participants' perceptions of the strength of the evidence, but it did affect whether they advocated arresting him.<sup>64</sup> Participants primed to achieve success did not find the evidence against the suspect to be any stronger than did participants primed to avoid mistakes, but achieve-primed participants were nevertheless more willing to take action based on that evidence and arrest the suspect.<sup>65</sup>

This finding has implications for understanding how jurors interpret the reasonable doubt standard in criminal cases. Many courts refuse to define reasonable doubt when instructing jurors in criminal cases<sup>66</sup> because they consider the phrase self-explanatory and worry that attempts to refine it will backfire and make it less precise.<sup>67</sup> However, the current findings imply that jurors can be inadvertently primed to employ different standards in judging the sufficiency of the evidence.<sup>68</sup> This suggests that burdens of proof are not static, self-explanatory concepts. Rather, what juries perceive as sufficient evidence may fluctuate based on the salient features of the situation. The framing of a jury instruction may emphasize the importance of achieving success by doing justice,<sup>69</sup> or the language chosen by an advocate in closing argument may highlight the cost of making an error. The lab-based experimental evidence we present here cannot resolve the question of whether the subtle difference in language used that produced effects in

64. Participants in the achieve-prime condition were 65.75% ( $SD = 14.57$ ) certain that the suspect was the culprit, while participants in the avoid-prime condition were 61.83% certain ( $SD = 17.05$ ); the difference between these two conditions was not statistically significant,  $t(125) = -1.39, p > .10$ .

65. Of participants primed to achieve success, 71% were willing to arrest, compared to only 51% of participants primed to avoid failure,  $\chi^2(1, N = 125) = 5.15, p < .05$ .

66. See, e.g., *United States v. Blackburn*, 992 F.2d 666, 668 (7th Cir. 1993) (admonishing that district courts should not define reasonable doubt); *United States v. Adkins*, 937 F.2d 947, 950 (4th Cir. 1991) ("This circuit has repeatedly warned against giving the jury definitions of reasonable doubt . . ."); *Grant v. State*, 703 P.2d 943, 946 (Okla. Crim. App. 1985) (emphasizing that trial judges should not define "reasonable doubt").

67. See, e.g., FEDERAL CRIMINAL JURY INSTRUCTIONS OF THE 7TH CIR. § 2.07 (1980) ("The Committee recommends that no instruction be given defining 'reasonable doubt.'"); *United States v. Shaffner*, 524 F.2d 1021, 1023 (7th Cir. 1975) ("[U]se of an instruction defining reasonable doubt presents a situation equivalent to playing with fire."); see also Note, *Reasonable Doubt: An Argument Against Definition*, 108 HARV. L. REV. 1955, 1955 (1995) ("[C]ourts should not attempt to define the term in conveying the reasonable doubt concept to juries."). For arguments in favor of defining reasonable doubt to jurors, see Timothy P. O'Neill, *Instructing Illinois Juries on the Definition of "Reasonable Doubt": The Need for Reform*, 27 LOY. U. CHI. L.J. 921, 954 (1996).

68. See *supra* Part II.

69. See, e.g., H. Alston Johnson III, LA. CIVIL LAW TREATISE, CIVIL JURY INSTRUCTIONS § 2.01 ("Above all, the community wants you to attempt to achieve justice . . .").



those settings would also produce results in a real trial. However, the possibility that small language differences matter in setting the standard for important judgments such as how much doubt is “reasonable” certainly warrants further empirical study.

### *B. Counterfactual Mindset and Consideration of Alternatives*

Considering alternatives induces a mindset in which people spontaneously think about how things might have turned out differently.<sup>70</sup> Consider a case in which the defendant argues that it was not foreseeable that his actions would have caused the plaintiff’s injuries. Jurors hearing the case must put themselves in the shoes of the defendant and determine what would have been reasonably foreseeable at the time of his actions.<sup>71</sup> If those jurors have previously generated an alternative explanation as part of another task, they may carry over that mindset to the task of evaluating what the defendant should have foreseen given the information available at the time. If generating an alternative outcome comes relatively easily, the jurors may be more likely to conclude that the defendant should have foreseen the particular consequences that came about from his actions. On the other hand, if generating alternative outcomes feels difficult, they may be more sympathetic to the defendant’s failure to foresee the plaintiff’s injuries.<sup>72</sup>

---

70. Adam D. Galinsky & Gordon B. Moskowitz, *Counterfactuals as Behavioral Primes: Priming the Simulation Heuristic and Consideration of Alternatives*, 36 J. EXPERIMENTAL SOC. PSYCHOL. 384, 384 (2000).

71. See, e.g., MODEL CIVIL JURY INSTRUCTIONS FOR THE DIST. CTS. OF THE 3D CIR. § 9.4.1 (2006) (“[I]f [plaintiff’s] injury was caused by a later, independent event that intervened between [defendant’s] act [or omission] and [plaintiff’s] injury, [defendant] is not liable unless the injury was reasonably foreseeable by [defendant].”) (alterations in original); ARK. MODEL JURY INSTRUCTIONS, CIVIL AMI § 1003 (2007) (“A manufacturer of a [product] has a duty to give reasonable and adequate instructions with respect to the conditions and methods of its safe use when danger is reasonably foreseeable in its use . . .”).

72. But having a jury consider *too* many alternatives can have the opposite effect—making the course of events that occurred seem inevitable. People use feelings of fluency to inform judgments. That is, if something feels difficult, it seems less likely to be correct, but something that feels easy seems right. It might be easy to imagine how the defendant’s actions could have led to a different result, but generating many alternative outcomes would usually be more challenging. Thus, a jury helped to see just one alternative may come to see other alternatives as possible, but a jury asked to generate many alternatives might find this task difficult and perceive the current outcome as the only one possible. See Lawrence J. Sanna & Norbert Schwarz, *Debiasing the Hindsight Bias: The Role of Accessibility Experiences and (Mis)attributions*, 39 J. EXPERIMENTAL SOC. PSYCHOL. 287, 287, 293 (2003); Norbert Schwarz, *Accessible Content and Accessibility Experiences: The Interplay of Declarative and Experiential Information in Judgment*, 2 PERSONALITY & SOC. PSYCHOL. REV. 87, 87–88 (1998).

Sentencing decisions present another way in which the generation of counterfactuals may be relevant. Jurors in capital cases are often asked to determine whether a defendant poses a risk of future dangerousness;<sup>73</sup> similarly, when determining a sentence, judges in non-capital cases consider the likelihood that a particular defendant will recidivate.<sup>74</sup> A defendant who seems apt to repeat criminal behavior in the future is more likely to receive a harsher sentence than one who does not seem to pose a danger. The easier it is for the judge or juror to consider alternative outcomes, the more plausible it should seem that the defendant will deviate from past behavior. In other words, decision makers primed to generate just one counterfactual might consider a defendant with a criminal history to be more likely to obey the law despite past behavior, leading them to impose a less severe sentence.<sup>75</sup>

A counterfactual mindset might also affect how appellate judges evaluate the prejudicial effect of trial errors on criminal convictions. Courts are reluctant to overturn convictions for technicalities and therefore deem some trial errors as “harmless.”<sup>76</sup> An appellate court considers an error harmless if it is persuaded beyond a reasonable doubt that the error did not contribute to the verdict.<sup>77</sup> In other words, the reviewing court determines whether the same verdict would have been reached even if the error had not occurred; if the court believes that the jury could have reached a different verdict but for the error, the conviction cannot stand.<sup>78</sup>

---

73. See, e.g., MANUAL OF MODEL CRIMINAL JURY INSTRUCTIONS FOR THE DIST. CTS. OF THE 8TH CIR. § 12.08 (2007) (listing as a factor to be considered in deciding whether to impose the death penalty that the defendant “would be a danger in the future to the lives and safety of other persons”); WASH. PATTERN JURY INSTRUCTIONS, CRIMINAL WPIC § 31.07 (1994) (instructing jurors in capital cases to consider “[w]hether there is a likelihood that the defendant will pose a danger to others in the future”).

74. See, e.g., 18 U.S.C. § 3553(a)(2)(C) (2006) (requiring that sentencing judges consider “the need for the sentence imposed . . . to protect the public from further crimes of the defendant”), *invalidated in part on other grounds by* United States v. Booker, 543 U.S. 220, 222 (2005) (holding that the Federal Sentencing Guidelines are not mandatory); OHIO REV. CODE ANN. § 2929.12(A) (LexisNexis 2007) (stating that sentencing judges “shall consider the factors . . . relating to the likelihood of the offender’s recidivism”).

75. See § 2929.12(A).

76. *Kotteakos v. United States*, 328 U.S. 750, 776 (1946); see also Jeffrey S. Jacobi, *Mostly Harmless: An Analysis of Post-AEDPA Federal Habeas Corpus Review of State Harmless Error Determinations*, 105 MICH. L. REV. 805, 805 (2007).

77. *Chapman v. California*, 386 U.S. 18, 24 (1967).

78. *Sullivan v. Louisiana*, 508 U.S. 275, 279 (1993).

Harmless error review therefore requires a reviewing court to engage in counterfactual reasoning.<sup>79</sup> Appellate judges must determine whether a case might have gone differently if the jury had never been exposed to an inadmissible piece of evidence, or if the prosecutor had not been allowed to make an improper argument. The easier it is for the appellate judges to imagine an alternative outcome, the more likely they should be to find that the jury would have returned a different verdict but for the trial error. A counterfactual mindset would enhance the facilitation of alternatives, and might therefore make a judge less likely to find a trial error harmless.

### C. *Perceived Power*

Power is associated with seeing the big picture; lack of power is associated with focusing on details.<sup>80</sup> As the authors of one study on the psychological implications of power explained, bosses have five-year plans, employees worry about getting through the week.<sup>81</sup> As in the case of temporal distance, what matters is perceived power. Depending on how they are treated, jurors can feel powerful or powerless. They may feel like small parts in a big process, but as a group, jurors actually have tremendous power. Appellate courts largely defer to juries' findings of fact and assessments of witness credibility, even though jurors are never asked to justify their decisions.<sup>82</sup> Consequently, they can choose to acquit a defendant who they believe committed the elements of an offense when they feel that the law itself or its application in that particular case would be unjust.<sup>83</sup> But no one tells jurors of this power, and they may not perceive themselves as powerful. Rather, many jurors report being intimidated by the process—they are unfamiliar with the rules of trial, the judge seems omnipotent, and the lawyers talk over

---

79. See David R. Dow & James Rytting, *Can Constitutional Error Be Harmless?*, 2000 UTAH L. REV. 483, for a discussion of the philosophical problems presented by counterfactual analyses.

80. See Keltner et al., *supra* note 43, at 265; Smith & Trope, *supra* note 43, at 578.

81. Smith & Trope, *supra* note 43, at 578.

82. See, e.g., *Caldwell v. Russell*, 181 F.3d 731, 738 n.6 (6th Cir. 1999) (“[T]he court must defer to a jury’s credibility determinations and resolutions of conflicts in testimony, weight accorded to evidence, and reasonable inferences drawn from the basic facts to reach ultimate factual conclusions.”), *abrogated on other grounds* by *Mackey v. Dutton*, 217 F.3d 399, 406 (6th Cir. 2000); *Johnson v. United States*, 756 A.2d 458, 461 (D.C. 2000) (“In recognizing the jury’s role in weighing the evidence, [this court] will defer to its credibility determinations, as well as its ability to draw justifiable inferences of fact.”).

83. See *Jones v. United States*, 526 U.S. 227, 243–47 (1999) (discussing historical justification for allowing juries this power).

their heads.<sup>84</sup> If they perceive themselves as being in a position of low power, that perception may affect how they process information—if they feel that they lack power, they may focus more on the details of a case with less attention to the big picture.<sup>85</sup>

A perception of power or lack of it could therefore affect decision making in several ways. Decision makers who process evidence with greater attention to detail may be better at following the evidence in a complex case—one in which causation is not obvious and that requires an understanding of statistical probabilities, such as in a product liability case against a drug company where it is not clear whether the defendant's product caused the plaintiffs' injuries. They may be less likely to rely on heuristics, hesitating to conclude that where there's smoke there's fire, for instance, or to award damages to a plaintiff simply because a defendant is unsympathetic or has deep pockets.

Legal actors may inadvertently signal to jurors that they either have power or lack it, with unintended consequences. For instance, some judges take great care to make jurors comfortable by explaining courtroom procedures, making sure they do not wait, and treating them with respect. Other judges are less able to attend to jurors' comfort, leading those jurors to feel powerless. Attorneys may also cue perceptions of power inadvertently. A lawyer may emphasize in closing argument the gravity of the jury's decision in an effort to motivate the jury to process evidence more carefully. The lawyer may instead evoke a mindset associated with power, reminding the jury that it, and no one else, has the power to decide, and thus induce the jury to engage in less detailed processing. Whether such an argument would have this effect is far from certain and requires empirical testing to know for sure. But presumably most advocates seeking to motivate deeper processing of the evidence would not even consider the possibility that reminding jurors of their power could backfire.

#### *D. Deliberative-Implementation Mindset and Criminal Investigations*

When police officers investigate a crime, they must first figure out what happened—who did it and why. But at some point in every case

---

84. Diane Wiley, *Practical Tips for Jury Selection in Civil Rights Cases: Bad Attitudes and Other Common Problems*, in 11 CIVIL RIGHTS LITIGATION AND ATTORNEY FEES ANNUAL HANDBOOK 15-1 (1995), available at <http://www.njp.com/articles/PracticalTipsforJurySelection.pdf> (“[M]any jurors tell us they feel nervous and often intimidated, they are worried about being ‘cross-examined.’”)

85. Smith & Trope, *supra* note 43, at 578.

that ends in prosecution, investigators must shift their attention from determining what happened to proving it. That is, once they have identified a suspect and developed a theory of the case, investigators must gather evidence to allow the prosecutors to prove that case in court. This shift from investigation to case building allows for action but presents a risk that investigators will overlook new evidence that undermines their theory of a case. Evidence that points to another suspect or calls into question the suspect's guilt may arise later in the investigation, after investigators have psychologically committed to a theory that the suspect is guilty. Understanding how investigators make this shift and its consequences for how they search for new information therefore offers insight into the investigatory process and for improving accuracy of criminal investigations.

Deliberative and implemental mindsets appear to be at work in this process. The task of choosing a course of action activates a different mindset than does the task of implementing it. Thus, people who are still deliberating on a goal process information differently than do people who take the next step and begin to implement that goal.<sup>86</sup> In particular, people in a deliberative mindset weigh information in a more even-handed and objective way than do people in an implemental mindset, who tend to be more optimistic about their likelihood of success.<sup>87</sup> This makes sense; attending to the pros and cons of a decision before committing to it allows one to choose the best course of action; after committing to that goal, second-guessing that decision would generally slow progress.<sup>88</sup> In light of this research, it would be reasonable to predict that an investigator who approaches a case with a deliberative mindset would be relatively receptive to evidence that exculpates a suspect and generally more open-minded about the possibility of other suspects; once that investigator decides to pursue a particular culprit, he or she should show greater bias and be less able to evaluate evidence objectively. Further studies applying research on deliberative and implemental mindsets to criminal investigations have the potential to reveal useful insights into how investigators search for and interpret information, and how they may fall short.

---

86. Peter M. Gollwitzer et al., *Planning and the Implementation of Goals*, in HANDBOOK OF SELF-REGULATION: RESEARCH, THEORY, AND APPLICATIONS 211, 211-12 (Roy F. Baumeister & Kathleen D. Vohs eds., 2004).

87. *See id.*

88. Shelley E. Taylor & Peter M. Gollwitzer, *Effects of Mindset on Positive Illusions*, 69 J. PERSONALITY & SOC. PSYCHOL. 213, 223-25 (1995).

### *E. Mindset Fit and Persuasion*

Mindset may also be relevant to likely success of persuasion attempts. When an approach to working on a problem is congruent with current mindset,<sup>89</sup> the approach feels more appealing than if the approach requires shifting gears. Researchers have found that this fit affects whether people find a message persuasive. In one study, participants primed to focus on achieving ideals were more persuaded by messages imploring them to eat more fruits and vegetables when that message was framed in terms of pursuing goals and aspirations; in contrast, participants primed to be vigilant in satisfying duties and staying safe were more persuaded when those messages were framed in terms of avoiding bad outcomes.<sup>90</sup>

Thus, framing a persuasive message to match the listener's mindset can make that message seem more compelling, an obvious concern for any lawyer who must persuade a jury to accept a certain view of the facts or a judge to rule favorably on a point of law. Moreover, the potential for enhancing the persuasiveness of a message could extend to other mindsets. For instance, a listener in a deliberative mindset may find a message framed in terms of weighing options more persuasive than someone in an implemental mindset. Conversely, a listener in an implemental mindset would be more amenable to an argument focused on the benefits of taking action.<sup>91</sup> Again, further empirical research is necessary to know the extent to which fit between an argument and the listener's mindset enhances persuasiveness in legal settings.

## V. CONCLUSION

Lawyers intuitively understand that individual differences matter for legal judgments and decision making, and that calling forth certain concepts can affect how people interpret and judge evidence. But lawyers generally overlook the influence of mindset on those very same judgments—that is, they fail to consider how situational cues can prime a way of making sense of the world that affects how people perceive evidence and receive arguments.

Ignoring mindset means neglecting the third piece of the decision-making puzzle. Consider common situations involving legal decision

---

89. For a review, see Joseph Cesario et al., *Regulatory Fit and Persuasion: Transfer from "Feeling Right,"* 86 J. PERSONALITY & SOC. PSYCHOL. 388, 389 (2004).

90. *Id.* at 391.

91. See Gollwitzer et al., *supra* note 86.

making—a judge ruling on an evidentiary matter, a jury determining the guilt of a criminal defendant, or a police officer deciding whether to arrest a suspect. The first piece of the puzzle is the individual decision maker—the person’s attitudes, past experiences, and motivations can affect how individuals perceive and weigh the evidence. The subject matter at issue also matters—a child molestation case may elicit different reactions than would a simple negligence suit. The final piece is mindset—the mental procedure the decision maker applies to the problem. Mindset bears on decision making in subtle but potentially powerful ways; it affects whether one attends to details or focuses on the big picture, whether one exercises restraint or rushes to take action, and whether one readily generates counterfactuals or sees a given outcome as the only one possible—to name just a few.

In unambiguous situations, mindset may be less central than in more ambiguous situations. A murder suspect caught holding the bloody knife over the corpse may not escape conviction because his clever attorney primed the jury to exercise caution in its deliberations unless there are other reasons to doubt that what seems to be really is. The effect of mindset should be more clearly evident in close cases, such as when a jury must grapple with the reasonable doubt standard or a judge must decide whether to go beyond existing precedent in a novel case. In these cases, mindset could play an important and underappreciated role in decision making. We have attempted to show how this might happen by offering ways in which mindset could affect judgment in a variety of legally relevant situations. Our integrative review and new studies suggest that inducing a mindset focused on either achieving success or avoiding mistakes affects how people view controversial criminal justice issues, hinting at a larger phenomenon that warrants further empirical study. We offer hypotheses about other mindsets and their potential effects in legal contexts as an appeal for further research in this largely overlooked phenomenon.

## APPENDIX 1

### *Rights of Criminal Defendants*

1. How do you feel about the rights given to people who are accused of crimes?
  - a. The legal system gives them too many rights.
  - b. The legal system gives them the correct amount of rights.

- c. The legal system gives them too few rights.
2. How do you feel about the rights given to people who have already been convicted of crimes?
  - a. The legal system gives them too many rights.
  - b. The legal system gives them the correct amount of rights.
  - c. The legal system gives them too few rights.
3. Do you agree or disagree with the following statement: "It is more important to let ten guilty people go free than to punish one innocent person for a crime that he/she did not commit."?
  - a. Strongly agree
  - b. Somewhat agree
  - c. Somewhat disagree
  - d. Strongly disagree
4. Some people have proposed amending the Constitution to require that everyone accused of a crime be accompanied by a lawyer during all questioning by law enforcement officers. Would you favor or oppose this change in the Constitution?
  - a. Strongly favor
  - b. Somewhat favor
  - c. Somewhat oppose
  - d. Strongly oppose
5. Recently, the governor of Illinois declared a moratorium on executions in that state until the procedures surrounding the death penalty could be reviewed. Do you think there should be a temporary moratorium or halt in the death penalty to allow government to reduce the chances that an innocent person will be put to death, or do you think there should not be a moratorium because there are already sufficient safeguards to prevent the execution of innocent people?
  - a. Strongly favor a moratorium
  - b. Somewhat favor a moratorium
  - c. Somewhat oppose a moratorium
  - d. Strongly oppose a moratorium



## APPENDIX 2

*Punishment of Convicted Criminals*

1. For criminals convicted of premeditated murder, which of the following do you think is usually the most appropriate sentence?
  - a. 25 years in prison
  - b. Life in prison with the possibility of parole
  - c. Life in prison without the possibility of parole
  - d. The death penalty
  
2. Do you agree or disagree with the following statement: “If a gun is used during a crime, the sentence should be twice as long.”?
  - a. Strongly support
  - b. Somewhat support
  - c. Somewhat oppose
  - d. Strongly oppose
  
3. In general, how do you feel about the way the criminal justice system punishes people convicted of drug offenses?
  - a. It treats them too leniently.
  - b. It treats some people too harshly, and others too leniently.
  - c. It usually imposes fair sentences.
  - d. It is too harsh.
  
4. In general, how do you feel about the way the criminal justice system punishes people convicted of violent offenses, like assault or murder?
  - a. It treats them too leniently.
  - b. It treats some people too harshly, and others too leniently.
  - c. It usually imposes fair sentences.
  - d. It is too harsh.