

Combating biased decisionmaking & promoting justice & equal treatment

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abstract

This article draws on the behavioral science literature to offer empirically driven policy prescriptions that can reduce the effect of bias and ameliorate unequal treatment in policing, the criminal justice system, employment, and national security.

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Core Findings

What is the issue?
Preserving the balance
between security
and human rights
often involves difficult
trade-offs. Behavioral
interventions to reduce
bias in law enforcement
and criminal justice are
cost-effective ways to
enhance both outcomes.

How can you act? Selected interventions include:

1) Reduce discretion in police stop-and-search decisions to reduce arbitrary alienation
2) Develop evidence-based practices to increase the number of prosocial contact interactions between law enforcement and citizens
3) Mask or blind prejudicial information from decisionmakers.

Who should take the lead?

Policymakers and decisionmakers in law enforcement, criminal justice, labor, national security

ias-systematic differences in decisionmaking caused by irrelevant factors—can often be unintentional and cause injustice and unequal treatment. Bias may be amplified in situations of uncertainty or ambiguity (such as during discretionary police stops), when people weigh and assess information (such as when hiring or promoting employees), or when people consider competing values and need to make trade-offs (such as when choosing whether to intervene during humanitarian crises). In this article, we focus on improving decisionmaking via tools and techniques, such as prescriptive instructions, validated risk assessment instruments, the removal of irrelevant information from the decision context, and structured decisionmaking techniques. We recognize that racial, ethnic, gender, and other disparities result from a multitude of causes, with some important causes operating at the organization and societal level. It is not our intent to suggest that biases operating at the individual level are the sole, or even the most influential problem. Rather, they are where recent behavioral science is most relevant and likely to generate effective solutions. Our approach is also not one of strong regulatory mandates or sanctions. Instead, we offer interventions to reshape the decision environment to promote and improve decisionmaking. We describe how these practices can ameliorate the effect of biases, reduce inequalities, and improve the likelihood that justice prevails.

Improve Police & Pretrial Detention Decisions to Reduce Unequal Treatment

Recent fatal officer-involved shootings of Black men and fatal shootings of police by citizens highlight the strained relations between communities of color and American law enforcement. However, these high-profile events represent only the tip of the iceberg. In much, if not most of the country, minorities, as well as the poor, are often subject to bias and unequal treatment at multiple points in the criminal justice system. In what follows, we present interventions that could substantially increase equal treatment in stop-and-search decisions and pretrial detention in federal district courts.

Reduce Discretion in Stopand-Search Decisions

Policing data show extremely high rates of routine discretionary stops and indicate that police are dramatically more likely to stop, search, arrest, and use force against minorities compared with Whites.1 Discretionary stops are often based on highly subjective criteria² (for example, furtive movements) and are not particularly accurate (only 2%-10% of stops vield evidence of contraband or weapons).3 Even when police stops do not lead to citation or arrest, they create a sense of arbitrariness that engenders alienation among members of targeted communities.4 This alienation, in turn, undermines cooperation with police.5 Stop-andsearch rates are so high in many jurisdictions that, despite their low yield rates, they contribute to untenably high rates of incarceration,6 often with devastating collateral consequences (for example, loss of employment or voting rights) for minorities.7 Drawing from research on decisionmaking and the compelling examples described below, we propose reducing police officer discretion in stop-and-search decisions.

Pretext stops are when officers use a legal excuse (for example, a broken taillight) to justify a stop for investigatory purposes (for example, looking for contraband). Such stops are regulated by a jurisprudence that is deferent to officer discretion and nearly agnostic to racial motives,8 and search decisions are governed by the inherently vaque reasonable suspicion standard. Yet behavioral science literature shows that decisionmaking under such ambiguous conditions is susceptible to many biases,9 including racial stereotyping.¹⁰ Two persuasive examples demonstrate that reducing officer discretion leads to reductions in stop-and-search rates while increasing yield rates and keeping crime rates stable. First, when the U.S. Customs Service reduced the list of reasons to conduct searches to a small set of behavior-related triggers, search rates went down 75%, hit rates (discoveries of contraband) quadrupled, and ethnic disparities all but disappeared. 11 Similarly, the recent dramatic reduction in pedestrian stop-and-frisks in New York City is concurrent with an increased rate of search yields and reductions in racial disparities in stop rates.12

Pilot Stop-and-Search Projects Recommended

Following are our suggestions for feasible interventions to regulate officer discretion in conducting street stops:

- Limit or eliminate officers' use of suspicion criteria that are most subjective and/or likely to be proxies for race. For example, ban furtive movements and walking in high-crime areas as reasons to stop and search.
- Improve instructions to officers regarding valid bases of suspicion. Strengthen documentation requirements for all pedestrian stops, not just those resulting in searches, force, or arrests, and bolster supervision and accountability both in the chain of command and, when possible, by independent oversight.
- Shift incentives for promotion away from those that motivate large numbers of fruitless detentions, such as arrest quotas, and toward positive indicators, like citizen commendations.

Implementing and testing these interventions would be both feasible and relatively inexpensive.

Reducing Pretrial Detention in Federal District Courts

The rate of pretrial detention-detaining a suspect during the time between the initial appearance before a judge or magistrate and the final judicial determination or dismissal occurs—has risen dramatically in the last two decades. According to the U.S. Department of Justice (DOJ), pretrial detention rates for federal defendants increased from 42% in 1995 to 64% in 2010.13 Furthermore, the number of federal defendants detained at any time during the duration of the case nearly tripled between 1995 and 2010 (increasing from 27,004 to 76,589 detentions). Although this DOJ report provided no data on the race, ethnicity, or gender of those who were detained, other research documents that Blacks and Hispanics are more likely to be detained in state14,15 and federal16 courts, even when controlling for the type and severity of the alleged crime, criminal history, and other legally relevant factors. 16,17 It is also likely that those who

"Those detained are more likely to be convicted and receive more severe sentences than those who are released pending trial."

are poor lack the resources to post bail or hire good lawyers and therefore are more likely to be detained, thus contributing to the discrepancy. In a recent court filing, the DOJ, citing the Constitution's guarantee of equal protection, stated, "Bail practices that incarcerate indigent individuals before trial solely because of their inability to pay for their release violate the Fourteenth Amendment" and "unlawfully discriminate based on indigence."18 Those detained are more likely to be convicted and receive more severe sentences than those who are released pending trial, even when controlling for the type and severity of the alleged crime and other legally relevant factors. 16,19,20 The high rate of pretrial detention in the federal district courts, coupled with its negative consequences and potentially inequitable application, is problematic.

Pilot Pretrial Detention Program Recommended

We recommend that several federal district courts implement a validated risk assessment instrument²¹ (which also accounts for indigence and other variables) and evaluate its effectiveness in reducing the overall number of persons and, in particular, the disparity in the characteristics of persons detained prior to trial. Most risk assessment instruments gather information on the offender's background, community ties, criminal history, history of substance abuse, and current situation.²¹

Enhance Police— Citizen Interactions & Procedural Justice

Procedural justice refers to both the real and the perceived fairness of the procedures used by authority figures when interacting with people

under their authority. A growing body of behavioral science evidence suggests that people feel more obligated to obey the law and are more likely to cooperate and comply when legal authorities treat them fairly. For example, when legal authorities treat people in a polite and respectful manner and rely on unbiased procedures when making discretionary decisions (such as whether to stop, search, cite, arrest, or use force), people are more likely to view those authorities as procedurally just and worthy of their compliance and cooperation.²²⁻²⁵ This research indicates that the real and perceived procedural fairness of the criminal justice system is likely to improve as police increase the number

of positive interactions they engage in within the communities they serve. One means of accomplishing such positivity is by implementing community-oriented policing (COP), which builds mutual understanding and trust through collaborative community partnerships and problem-solving exercises.

Promoting Contact Theory-Driven COP

Decades of psychological science research on intergroup contact indicates that respectful and prosocial contact between members of oppositional groups can reduce prejudice and ill will in robust and lasting ways.²⁶ This is the central premise of contact theory, and the theory has significant implications for the relationship between police and the public.²⁷

Despite its broad appeal, COP is subject to criticism that its tenets are too vague and it is unevenly implemented across agencies. Contact theory provides a useful foundation for designing COP interventions that focus more clearly on improving relationships between police and communities, especially those communities where police are often perceived as unjust and illegitimate.

Pilot COP Projects Recommended

We recommend that public safety funding entities support contact theory-driven COP by (a) rigorously testing the effects of COP interventions on a variety of key outcomes, including

"One study showed that procedural justice was associated with lower treatment by police officers may also levels of violence in federal prisons."

cooperation, compliance, and perceptions of police fairness and legitimacy (for example, developing and testing de-escalation methods intended to reduce conflict and minimize hostility in police interactions with citizens); (b) developing and disseminating evidence-based best practices meant to improve relationships between police and communities; and (c) incentivizing police departments to recruit incoming academy cohorts that better resemble the demographics of the community.^{28–30}

Promoting Procedural Justice

Most research on procedural justice in criminal justice settings focuses on the police, but

> recent research has begun to explore applications in court and correctional settings.^{5,31-35} Within policing, officers of the law can promote cooperation. compliance, and law-abiding behavior by treating people fairly. 24,36,37 These same benefits that result from fair apply in court and correctional settings. When defendants perceive that prosecutors and judges have treated them unfairly, for instance, they are more likely to view the legal system as illegiti-

mate; therefore, they feel less obligation to obey the law or comply with legal authorities. Similarly, prison authorities can benefit greatly from practices that reduce anger and defiance and encourage voluntary compliance and cooperation among inmates.

Research on procedural justice has begun to influence several domains of policy and practice and figured prominently in the landmark recommendations of President Obama's Task Force on 21st Century Policing.²⁸ While significant procedural justice-related research and reform is under way in policing, little research has taken place in corrections. However, the extant research is promising. For instance, one study showed that procedural justice was associated with lower levels of violence in federal prisons.³³ Other studies have found that procedural justice in prisons is associated with lower rates of misconduct while in prison and lower rates of recidivism after release.31,32

Pilot Procedural Justice Interventions Recommended

Our recommendation is to pilot procedural justice interventions in federal law enforcement agencies, district courts, and correctional agencies. Researchers conducting internally focused studies could examine existing behavioral data (for example, compliance and defiance measures such as grievances filed or number of sick days) to determine the effects on employees of procedural justice training for supervisors and managers. Externally focused studies could test the effects of training, policy changes, or other interventions associated with procedural justice on the attitudes and behaviors of arrestees, defendants, inmates, and other people processed by these agencies.

Actions in two related priority areas could also promote the broader goals of increased fairness and improved police—community relations. They are (a) eliminating coercive interrogation tactics, particularly on youth, and (b) supporting research to distinguish between and address two causes of racial disparities and misuse of force in policing: outliers (that is, "bad apples") and systemic sources (for example, implicit, unintentional bias). Together, these approaches can enhance equitable and effective policing and promote safe communities.

Reducing Bias by Blinding or Masking Decisionmakers

People are routinely influenced by social or physical cues that can bias their judgments away from normative standards of rationality and fairness.³⁸ For example, hiring decisions are often influenced by a candidate's race or gender, 39 which can lead to unequal treatment. Unfortunately, teaching people about these biases is usually ineffective, in part because people are often unable to consciously monitor the influence of these biases on their thought processes.40 However, these biases can be significantly reduced using a powerful approach known as blinding or masking, in which prejudicial or biasing information (for example, gender or race) is redacted or modified so that it is unavailable to the decisionmaker. 41 Indeed,

blinding is well-established in medical research and physics. For example, in a double-blind clinical trial, neither the patient nor the administering physician knows whether the treatment is real or a placebo. Less familiar are methods of blinding in physics, where the data are perturbed by adding noise or a systematic offset value so that the analyst is unable to massage the data to favor a preferred or an expected hypothesis—a method that could prove valuable for empirical research on contentious public policy topics.⁴² Outside of science and research, blinding methods are now used in business, education, journalism, and the arts. For example, in symphony orchestras, when instrumental auditions were conducted with the musician behind a curtain (so judges were unaware of the musician's gender), the likelihood of a woman being selected for the next round of auditions increased by 50%.43

Legal scholars and practitioners are beginning to investigate the application of blinding methods in forensic analysis, expert testimony, and legal fact finding by prosecutors, judges, juries, and arbitrators. 44 These methods also have considerable potential for improving decisionmaking in many commercial contexts (for example, recruitment and hiring, bank lending, and housing-related applications). 45 However, more research is needed to determine the most effective and efficient blinding methods. For example, how can information be selectively masked to block prejudicial cues while retaining probative cues? When during the decisionmaking process should the mask be lifted?

To help answer these questions, we propose four main steps for policymakers.

1. Engage in a Normative Analysis of the Types of Information Deemed Prejudicial or Inappropriate. It is important that masked factors are viewed as completely irrelevant to the integrity of the needed evaluation. For example, a candidate's race is an irrelevant normative cue in employment or criminal justice contexts and thus serves as an obvious candidate for blinding (see Sah, Robertson & Baughman, 2015, for more information on blinding prosecutors to the defendant's race).⁴⁴

2-10%

of stop-and-search yielding contraband or weapons evidence

400%

increase in contraband hit rates once U.S. Customs reduced search discretion

42-64%

jump in pretrial detention rates for federal defendants between 1995 and 2010

"There will always be a delicate balance between national security issues and human rights issues in today's reality."

- 2. Engage in Pilot Studies on the Efficacy of Masking Procedures Prior to Full-Scale Implementation. Pilot studies should examine the feasibility of implementation, as well as the effectiveness of mitigating bias. For example, in some contexts, masking might fail because of inadvertent cues from other types of available information (for example, aspects of a person's resume or curriculum vitae may indirectly signal that applicant's race).
- 3. Build Protocols to Ensure That Blinding Is Conducted in an Effective, Efficient, & Uniform Way. By effective, we mean that there should be an ongoing assessment of whether the information to be blinded is, in fact, fully blinded; this can be challenging when there are many correlated cues or indicator variables (for example, a degree from an all women's or a traditionally African-American college). To be efficient, blinding procedures should be designed in a manner that minimizes the cost and delay associated with the decision process. To be uniform, blinding procedures should be implemented consistently across cases.
- 4. Train Specialists in Blinding Procedures for Implementing & Monitoring the Masking Process. Specialists need to have the institutional legitimacy and independence to ensure the integrity of the process. Specialists could also engage in routine data collection that would allow for continued supervision of the efficacy of the masking procedure.

Initiative: Investigating the Collapse of Humanitarian Values in Decisionmaking

There will always be a delicate balance between national security issues and human rights issues

in today's reality. Decisions by government officials involving trade-offs that pit human rights against other important objectives are common, yet difficult and controversial. In such cases, there is often a disconnect between the high value placed on protecting human rights expressed by officials and the apparent low value revealed by the actions of those officials. In particular, humanitarian values may collapse when in competition with national security objectives threatened by the risk of terrorism.

Behavioral science research and theoretical models of judgment and choice lead to a hypothesis called the prominence effect that predicts this collapse.46 The prominence effect asserts that when making decisions, people become biased toward focusing on the most prominent consequence of an action rather than on their expressed values.47 This bias occurs because of the perceived need to justify or defend decisions. A choice made in accord with a prominent consequence is highly defensible (a key concern for politicians and other decisionmakers), even when that choice violates expressed values. For example, in today's America, worries about economic and physical security are highly prominent. Acting in defense of security, even at the cost of diminishing human rights, is likely to be highly defensible, leading to abuses such as racial profiling, unjustified stop-andsearch decisions, and refusals to intervene in mass atrocities.46 Immigration decisions offer another important example. Although providing a safe haven and opportunities for refugees is undoubtedly important, the possibility that some refugees might be terrorist sympathizers understandably raises strong concerns that may lead decisions and actions to igrnore these humanitarian benefits.48

This initiative is relevant to justice and correcting unequal treatment. Two steps could be taken to further examine whether the prominence effect might devalue human rights that are in competition with security objectives. First, researchers should conduct qualitative studies and controlled experiments along with thinkaloud discussions of the moral, ethical, and strategic implications of this possible bias. This research would give further insight into how bias

may emerge when humanitarian values conflict with national security. Second, conducting trials using structured decision-aiding techniques would determine whether these techniques correct biases in the weighting of humanitarian values in relation to security values. These decision-aiding techniques have shown promise in facilitating trade-offs among conflicting objectives and mitigating prominence bias.⁴⁹

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references

- 1. Glaser, J. (2015). Suspect race: Causes and consequences of racial profiling. New York, NY: Oxford University Press.
- Jones-Brown, D., Gill, J., & Trone, J. (2010). Stop, question & frisk policing practices in New York City: A primer. New York, NY: John Jay College of Criminal Justice, Center on Race, Crime and Justice
- New York Civil Liberties Union. (2011). Stop-and-frisk 2011. New York, NY: Author.
- 4. Lerman, A., & Weaver, V. (2014).

 Arresting citizenship: The democratic consequences of American crime control. Chicago, IL: University of Chicago Press.
- 5. Tyler, T., & Huo, Y. (2002). *Trust in the law: Encouraging public cooperation with the police and courts.* New York, NY: Russell Sage Foundation.
- Bonczar, T. P. (2003). Prevalence of imprisonment in the U.S. population, 1974–2001 (Special Report NCJ 197976). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- 7. Mauer, M., & Chesney-Lind, M. (2002). Invisible punishment: The collateral consequences of mass incarceration. New York, NY: New Press.
- 8. Whren v. United States, 517 U.S. 806 (1996).
- Tversky, A., & Kahneman, D. (1974, September 27). Judgment under uncertainty: Heuristics and biases. Science, 185, 1124–1131.
- Fiske, S. T., & Taylor, S. E. (1991). Social cognition (2nd ed.). New York, NY: McGraw-Hill.
- 11. Ramirez, D. A., Hoopes, J., & Quinlan, T. L. (2003). Defining racial profiling in a post–September 11 world. *American Criminal Law Review, 40,* 1195–1233.
- 12. Chauhan, P., Warner, T. C., Fera, A. G., Balazon, E., Lu, O., & Welsh, M. (2015, December). *Tracking enforcement rates in New York City, 2003–2014*. Paper presented at the meeting of the Citizens Crime Commission. New York, NY.
- Cohen, T. H. (2013). Pretrial detention and misconduct in federal district courts, 1995–2010 (Special Report NCJ 239673). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- 14. Bridges, G. S. (1997). A study on racial and ethnic disparities in superior court bail and pre-trial detention practices in Washington. Olympia, WA: Washington State Minority and Justice Commission.

- 15. Demuth, S., & Steffensmeier, D. (2004). The impact of gender and race-ethnicity in the pretrial release process. *Social Problems*, *51*, 222–242.
- 16. Spohn, C. (2009). Race, sex, and pretrial detention in federal court: Indirect effects and cumulative disadvantage. *University of Kansas Law Review, 57*, 879–902.
- 17. Kutataladze, B., Tymas, W., & Crowley, M. (2014). *Race and prosecution in Manhattan*. New York, NY: Vera Institute of Justice.
- 18. Williams, P. (2016, August 19). Justice Department says poor can't be held when they can't afford bail. *NBC News*. http://www.nbcnews.com/news/us-news/justice-department-says-poorcan-t-be-held-when-they-n634676
- Cohen, T. H., & Kyckelhahn, T. (2010). Felony defendants in large urban counties, 2006 (Bulletin NCJ 228944). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Walker, S., Spohn, C., & DeLone, M. (2011). The color of justice: Race, ethnicity and crime in America. Boston, MA: Cengage.
- Mamalian, C. A. (2011). State of the science of pretrial risk assessment. Gaithersburg, MD: Pretrial Justice Institute.
- 22. Maguire, E. R., Lowrey, B., & Johnson, D. (2016). Evaluating the relative impact of positive and negative encounters with police: A randomized experiment. *Journal of Experimental Criminology*. Advance online publication. doi:10.1007/ s11292-016-9276-9
- Mazerolle, L., Bennett, S., Antrobus, E., & Eggins, E. (2012). Procedural justice, routine encounters and citizen perceptions of police: Main findings from the Queensland Community Engagement Trial (QCET). Journal of Experimental Criminology, 8, 343–367.
- 24. Tyler, T. R. (2006). Why people obey the law. Princeton, NJ: Princeton University Press.
- 25. Tyler, T., Goff, P., & MacCoun, R. (2015). The impact of psychological science on policing in the United States: Procedural justice, legitimacy, and effective law enforcement. Psychological Science in the Public Interest, 16(3), 75–109.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751–783.

- Eller, A., Abrams, D., Viki, G. T., Imara, D. A., & Peerbux, S. (2007). Stay cool, hang loose, admit nothing: Race, intergroup contact, and public-police relations.
 Basic and Applied Social Psychology, 29, 213–224.
- 28. President's Task Force on 21st Century Policing. (2015). Final report of the President's Task Force on 21st Century Policing. Washington, DC: Office of Community Oriented Policing Services.
- 29. Shusta, R. M., Levine, D. R., Wong, H. Z., Olson, A. T., & Harris, P. R. (2015). Multicultural law enforcement: Strategies for peacekeeping in a diverse society (6th ed.). Upper Saddle River, NJ: Pearson.
- White, M. D., Cooper, J. A., Saunders, J., & Raganella, A. J. (2010). Motivations for becoming a police officer: Re-assessing officer attitudes and job satisfaction after six years on the street. *Journal of Criminal Justice*, 38, 520–530.
- 31. Beijersbergen, K. A., Dirkzwager, A. J. E., Eichelsheim, V. I., Van der Laan, P. H., & Nieuwbeerta, P. (2015). Procedural justice, anger, and prisoners' misconduct. *Criminal Justice and Behavior*, 42, 196–218.
- 32. Beijersbergen, K. A., Dirkzwager, A. J. E., & Nieuwbeerta, P. (2016). Reoffending after release: Does procedural justice during imprisonment matter? *Criminal Justice and Behavior*, 43, 63–82.
- Bierie, D. M. (2013). Procedural justice and prison violence: Examining complaints among federal inmates (2000–2007). Psychology, Public Policy, and Law, 19, 15–29.
- 34. Burke, K., & Leben, S. (2007). Procedural fairness: A key ingredient in public satisfaction. Court Review: The Journal of the American Judges Association, 44(1/2), 4–25.
- 35. Gover, A. R., Brank, E. M., & MacDonald, J. M. (2007). A specialized domestic violence court in South Carolina: An example of procedural justice for victims and defendants. Violence Against Women, 13, 603–626.
- 36. Johnson, D., Maguire, E. R., & Kuhns, J. B (2014). Public perceptions of the legitimacy of the law and legal authorities: Evidence from the Caribbean. *Law and Society Review, 48,* 947–978.
- 37. Lowrey, B. V., Maguire, E. R., & Bennett, R. R. (2016). Testing the effects of procedural justice and overaccommodation in traffic stops: A randomized experiment. *Criminal*

- Justice and Behavior, 43, 1430–1449. doi:10.1177/0093854816639330
- 38. Evans, J. S. T. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology, 59*, 255–278.
- 39. Riach, P. A., & Rich, J. (2002). Field experiments of discrimination in the market place. *The Economic Journal*, 112, F480–F518.
- 40. Milkman, K. L., Chugh, D., & Bazerman, M. H. (2009). How can decision making be improved? *Perspectives on Psychological Science, 4,* 379–383.
- 41. Robertson, C. T., & Kesselheim, A. S. (2016). Blinding as a solution to bias: Strengthening biomedical science, forensic science, and law. Cambridge, MA: Academic Press.
- 42. MacCoun, R. J., & Perlmutter, S. (2015, October 7). Blind analysis: Hide results to seek the truth. *Nature*, *526*, 187–189.
- 43. Godin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of "blind" auditions on female musicians. *American Economic Review, 90,* 715–741.
- 44. Sah, S., Robertson, C. T., & Baughman, S. B (2015). Blinding prosecutors to defendants' race: A policy proposal to reduce unconscious bias in the criminal justice system. *Behavioral Science & Policy*, 1(2), 69–76.
- 45. Feldman, Y., & Kricheli-Katz, T. (2015). The human mind and human rights: A call for an integrative study of the mechanisms generating employment discrimination across different social categories. Law & Ethics of Human Rights, 9, 43–67.
- 46. Slovic, P. (2015). When (in) action speaks louder than words: Confronting the collapse of humanitarian values in foreign policy decisions. *Illinois Law Review Slip Opinions*, 2015, 24–31.
- 47. Tversky, A., Sattath, S., & Slovic, P. (1988). Contingent weighting in judgment and choice. *Psychological Review, 95*, 371–384.
- 48. Brilliant, J. (2015, November 16). Gov. Pence suspends resettlement of Syrian refugees in Indiana. WTHR. http://www.wthr.com/article/ gov-pence-suspends-resettlement-ofsyrian-refugees-in-indiana
- 49. Gregory, R., Failing, L., Harstone, M., Long, G., McDaniels, T., & Ohlson, D. (2012). Structured decision making: A practical guide to environmental management choices. Chichester, United Kingdom: Wiley-Blackwell.