SYMPOSIUM

Implicit and Explicit Measurement Approaches to Research on Policy Implementation: The Case of Race-Based Disparities in Criminal Justice

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n 2011, more than 3% of all black men in the United States were imprisoned, compared to only 0.5% of all white men. Among prisoners ages 18 to 24, black men were imprisoned at a rate more than seven times that of white men (Carson and Sabol 2012). It is becoming increasingly urgent for researchers to understand what accounts for these race-based disparities.1 While a broad constellation of social problems exist that likely contribute to these disparities in concert, different fields of social science tend to focus on different types of explanations. Political scientists and sociologists have tended to emphasize the role of institutional factors, including criminal justice policies and practices, in maintaining race-based disparities. Social psychologists, in contrast, have tended to emphasize individual factors, including punitive responses to crime by jurors, judges, and criminal justice professionals.

This approach, what Tonry (2010) calls the "psychology of race relations," puts the focus on the extent to which individual criminal justice practitioners are affected by racial bias. For example, researchers have demonstrated that both police officers and lay community members display a racial bias when making rapid decisions about whether to shoot another individual with a gun (e.g., Correll et al. 2002; Correll et al. 2007; Glaser and Knowles 2008; Kahn and Davies 2011; Plant, Goplen, and Kunstman 2011). Researchers have also shown that not only a defendant's race, but also the extent to which a defendant has facial features that look stereotypically black, influences the likelihood that he or she will be sentenced to death (Eberhardt et al. 2006).

Although the institutional and individual levels of analysis are often considered to be distinct, they cannot be completely separated from one another. Because the implementation of criminal justice policies depends on the decision making and actions of individuals, researchers who are interested in racial disparities in criminal justice need to address both types of analysis—the institutional and policy level and the individual level. Policy implementation is almost necessarily influenced by individuals' perceptions, biases, and experiences (an orientation that some health policy researchers have come to adopt), but research on the nature of these behavioral influences in different policy domains has only just begun in earnest (see Brooks 2013; Shafir 2012). In the health policy arena, for example, some scholars have argued that implicit bias at the individual level should be considered as an account for persistent disparities in the quality of health care and health outcomes for racial and ethnic minorities compared to whites. In this context, Goodwin and Duke (2012) address the linkage between the individual and institutional levels of analysis:

Not only can implicit racial bias influence individual decisions about a particular patient, but also those individual decisions can aggregate over the course of the client-patient relationship and risk resulting in substantively different treatment for similarly situated patients of different ethnicities. Similarly, as these biases aggregate to change the landscape of a particular case, they also begin to alter the direction of the entire medical field. We contend that implicit racial bias can help explain the widening health disparity gap, patient accounts of poor quality of care, and physician decision-making. Indeed, implicit bias may help explain a deeply troubling history of disparate medical treatment and outcomes between racial minorities and whites in the United States (97).

The importance of the connection between individual and institutional perspectives also applies to policies within the domain of criminal justice; because these policies are carried out by individuals, an examination of these individuals' racebased attitudes and biases is a potentially crucial element of understanding why, at the aggregate level, such stark racial disparities persist. As in the health-care policy context, these individual attitudes and biases with regard to race and criminal justice can in turn be studied at multiple levels of analysis: explicit and implicit.

As described in the introduction to this symposium (see Ksiazkiewicz and Hedrick 2013 this issue), there are several important ways in which implicit and explicit measurements differ. The most important difference for our purposes is how the measures respond in domains that are socially sensitive. Implicit measures tend to outperform explicit measures in socially sensitive areas that might encourage individuals to mask their true attitudes on explicit measures. This is particularly true in the context of race (Greenwald et al. 2009). Thus, researchers who are interested in understanding racial disparities will likely benefit from the use of both explicit and implicit measurements. We do not suggest that explicit measures of race bias are not useful or informative; many excellent examples of the use of explicit measures to tap race-based attitudes and disparities in criminal justice exist (e.g., Barkan and Cohn 2005; Bobo and Johnson 2004; Green, Staerklé, and Sears 2006; Hurwitz and Peffley 2005; Johnson 2008; King and Wheelock 2007; Peffley and Hurwitz 2002; Peffley and Hurwitz 2010; Unnever 2008; Unnever and Cullen 2007; Unnever and Cullen 2010; Unnever, Cullen, and Jonson 2008). Our goal is to promote the use and integration of both implicit and explicit measurement in addressing racial disparities in criminal justice and to make clear that implicit measures have a place in political science research on this issue.

MORAL TYPECASTING IN EXPLICIT AND IMPLICIT PUNITIVE RESPONSES TO CRIME

Our own program of research on punitive responses to crime, based on moral typecasting theory, represents one example of an approach to understanding disparities in criminal justice using both explicit and implicit measures. This research is still in its early stages, but it illustrates the need to integrate both explicit and implicit measures in policy-related research. theory, individuals would perceive criminal offenders in ways that were biased by perceptions of the offenders' past actions. We found that this was, in fact, the case; participants in our studies tended to respond to the same criminal acts in different ways, depending on whether the actor was a target that they had previously deemed a moral agent or a moral patient. Participants viewed an actor as more morally agentic to the extent that he had committed crimes in the past, and they viewed an actor who committed *the exact same acts* as higher in moral patiency to the extent that he had been a victim in the past. These biased perceptions, moreover, had implications for criminal justice outcomes. Participants' perceptions of moral agency predicted more severe sentencing recommendations for the hypothetical offenders and a lower willingness to hire them for jobs after they served their sentences.

While these findings are preliminary, they have the potential to speak to the implications of various criminal justice policies. For example, finding a job after being released from prison is one of the most effective ways to prevent recidivism ex-convicts who are able to find jobs on their release are significantly less likely to recidivate than those who do not (see Bellair and Kowalski 2011). Based on this knowledge, parole boards often ask about a convict's access to a job as part of the parole decision-making process. Our findings, however, suggest that ex-convicts' ability to find work is partly based on biased perceptions by potential employers of their innate moral character—the more employers perceive an ex-convict as morally agentic, the less willing they are to hire him or her. Should this finding prove to be robust, then policies that exclusively

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According to moral typecasting theory (see Gray and Wegner 2009), individuals tend to perceive actors in a moral situation as moral agents or moral patients. Moral agents are the doers of good or evil in a given moral situation, and moral agency involves having control, responsibility, or blame. Moral patients are the targets of good or evil, and moral patiency involves the ability to experience pleasure or pain. Gray and Wegner (2009) have found that after observing a target in a moral situation, individuals tend to perceive the target as being fundamentally high in moral agency or moral patiency, and they tend to perceive future acts by the target in ways that are consistent with that moral character type (even when these perceptions are inconsistent with objective facts).

Because the crime context is rife with concerns about morality, moral typecasting theory has the potential to play a useful explanatory role in this domain. In a recent series of studies (see Miller and Borgida, under review (b)), we had participants make judgments about hypothetical male criminal offenders and victims. We predicted that, consistent with moral typecasting address the ex-convicts' motivation and effort in finding work, and neglect the perceptions and willingness of employers, will likely fall short. The findings suggest that recidivism rates might be further reduced by public awareness campaigns about ex-convicts or programs that teach ex-convicts how to present themselves to employers in ways that do not elicit perceptions of moral agency.

A second component of our early work on moral typecasting and crime used implicit measurement techniques, in addition to asking participants to make explicit judgments (see Miller and Borgida, under review (a)). Using both an implicit association test (IAT) and a modified Stroop task, we found that exposure to criminal acts or criminal offenders automatically activated the concept of moral agency, and exposure to the experience of victimization or to victims of crime automatically activated the concept of moral patiency.

The existence of these automatic and implicit perceptions of moral character underscores the importance of using multiple measurement approaches. First, participants' explicit and

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implicit perceptions of the targets in our study were only weakly correlated (the correlations were positive but did not reach significance), suggesting that these perceptions are largely independent of one another. If we had not used measures that could capture implicit perceptions of moral agency and patiency, we would have been operating under the assumption that moral typecasting takes place at a level of processing and memory that is under the individual's control and introspectively accessible to the individual. As it turns out, at least part of this process seems to take place automatically in a way that the individual cannot control or access.

Second, explicit and implicit perceptions of moral character did not predict the same types of outcomes. Although (as described earlier) our explicit measures predicted sentencing recommendations and the willingness to hire, our implicit measures failed to predict either of these outcomes. We need to conduct further research to ascertain exactly what types of criminal justice outcomes are susceptible to influence by implicit moral typecasting, and what types of outcomes are influenced more heavily by explicit moral typecasting. In the meantime, however, from our initial studies we have learned that these categories of outcomes seem to be distinct.

Finally, our notions about potential policy interventions are affected by the knowledge that moral typecasting takes place both explicitly and implicitly. If moral typecasting is activated Research has shown that the difficulties Americans face in interacting with the criminal justice system are disproportionately more severe for black Americans than for whites. For example, as described above, black men face starkly higher rates of imprisonment than white men. In 2010, 42% of prisoners under sentence of death were black, despite the fact that black Americans only made up about 12% to 13% of the population (Snell 2011). The black population is also victimized by crime at much higher rates than the white population. In 2011, black Americans were the victims of violent crimes at a rate 22.8% higher than that of whites and serious violent crimes at a rate 66.2% higher than that of whites (Truman and Planty 2012). Researchers have also found that the difficulties ex-convicts face in finding jobs after being released from prison are sharply exacerbated for black ex-convicts (e.g., Pager 2003; Pager and Quillian 2005; Pager, Western, and Bonikowski 2009; Pager, Western, and Sugie 2009). Although a criminal record makes it more difficult for anyone to be hired, a record makes it much more difficult for black individuals to be hired than for whites. This process exacerbates the racial disparities that exist in incarceration rates by making it more difficult for black ex-convicts than white ex-convicts to find jobs and reintegrate into society.

While sociology and political science research on racebased disparities in the hiring of ex-convicts has led to invalu-

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automatically on exposure to a crime or criminal offender, then successful interventions will either need to tap into and change individuals' implicit perceptions or teach individuals how to override their implicit perceptions when they make decisions or take actions. Just as training for police officers has been effective in reducing racial bias in split-second shooting decisions (e.g., Correll et al. 2007; see also Glaser and Knowles 2008, on the role of motivation to control prejudice in reducing shooter bias), other types of training or contextual interventions may reduce the effects of implicit perceptions of moral agency on criminal justice decisions. Without the use of implicit measures, researchers in any field will be hampered in their ability to understand the individual-level processes that take place in the criminal justice context, which makes it difficult to understand the behavioral effects of policies and prescribe policy changes. As Brooks (2013) points out, policy interventions that are not informed by empirical psychological findings can do more harm than good.

MORAL TYPECASTING AND RACE-BASED DISPARITIES IN CRIMINAL JUSTICE

What do the findings on explicit and implicit moral typecasting have to do with race-based disparities in criminal justice?

able knowledge about the relationship between race, employment, and criminal outcomes, this research has not yet identified the individual-level, psychological mechanisms underlying the hiring decisions that employers make. In other words, the existing findings demonstrate that a criminal record is more damaging to a black job applicant than a white applicant, but these do not explain why this is the case. Based on our early research on moral typecasting, we believe that moral typecasting theory has the potential to contribute to that understanding. We know that the process of moral typecasting has implications for hypothetical hiring decisions, and we are looking into the relationship between moral typecasting and race. It will be crucial as we embark on this research program to rely on both explicit and implicit measures of individuals' responses to offenders. Given the important role of implicit perceptions and attitudes in the context of race (see Greenwald et al. 2009), there is a significant potential for implicit moral typecasting to influence disparate hiring outcomes for black and white ex-convicts, as well as many other types of criminal justice outcomes. Understanding the extent to which implicit moral typecasting and implicit racial prejudice play a role in race-based disparities in criminal justice, beyond the roles of explicit processes and institutional-level factors, will contribute to the ways in which interventions can be designed to reduce, if not eradicate, these disparities.

CONCLUSION

This article provides an example of one context in which explicit and implicit measures are distinct and complementary. We propose that political scientists who are interested in criminal justice policy will benefit from the use of individuallevel measures at both explicit and implicit levels of processing. Not only do these measures correspond to distinct sets of outcomes, but they also might lead to the recommendation of different policy interventions. Any program of study that relies exclusively on one level of processing or another may be limited in both understanding and effectiveness.

Although our own research on moral typecasting and criminal justice outcomes is in its early stages, we have already benefitted from the inclusion of both explicit and implicit measures. The results of our IAT and Stroop studies have already influenced our goals and hypotheses for future studies, as well as our ideas about potential policy interventions down the road. Had we not chosen to complement our explicit measures with these implicit measures, our understanding of and theorizing about moral typecasting in criminal justice would be hindered from the beginning. tioners. Because black-white disparities are the most heavily studied, we focus on them as our primary example in this paper. We do not mean to imply that other types of disparities are less important, problematic, or in need of intervention.

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Political scientists who are interested in studying policy within any area of criminal justice, and, indeed, within any policy area in which racial biases play a role, will benefit from substantive consideration of both explicit and implicit measurement.

In this article, we emphasized one specific stage of criminal justice-the hiring of ex-convicts after release-as our running example. However, it is possible that explicit and implicit moral typecasting play a role in decision-making during other stages as well. We plan to investigate the extent to which these two processes underlie other criminal justice outcomes that are characterized by racial disparities, such as police officers' decisions to arrest, the severity of charges that prosecutors impose on juvenile and adult suspects, prosecutors' decisions to make plea bargains, judges' decisions to offer bail, jurors' conviction decisions and victim-blaming tendencies, and prison officials' decisions to offer parole. We hope that our experiences, along with the other excellent papers in this symposia, will serve as a call to action and inspire political scientists to consider using implicit measures in their research on the behavioral foundation of various policies and practices. Political scientists who are interested in studying policy within any area of criminal justice, and, indeed, within any policy area in which racial biases play a role, will benefit from substantive consideration of both explicit and implicit measurement.

NOTE

 There are many other types of disparities in the American criminal justice system that deserve attention by researchers, policymakers, and practi-

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