Journal of Experimental Social Psychology 48 (2012) 1267–1278

Contents lists available at SciVerse ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Long-term reduction in implicit race bias: A prejudice habit-breaking intervention ☆

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HIGHLIGHTS

- ► We developed an intervention to produce long-term reductions in implicit race bias.
- ► The intervention produced reductions in implicit bias that lasted up to 8 weeks.
- ► The intervention also increased awareness of bias and concern about discrimination.
- ► Our results raise the hope of reducing the pernicious effects of implicit race bias.

ARTICLE INFO

Article history:
Received 28 March 2012
Revised 11 June 2012
Available online 20 July 2012

Keywords:
Prejudice
Stereotyping
Intervention
Reduction
Implicit bias
Self-regulation

ABSTRACT

We developed a multi-faceted prejudice habit-breaking intervention to produce long-term reductions in implicit race bias. The intervention is based on the premise that implicit bias is like a habit that can be broken through a combination of awareness of implicit bias, concern about the effects of that bias, and the application of strategies to reduce bias. In a 12-week longitudinal study, people who received the intervention showed dramatic reductions in implicit race bias. People who were concerned about discrimination or who reported using the strategies showed the greatest reductions. The intervention also led to increases in concern about discrimination and personal awareness of bias over the duration of the study. People in the control group showed none of the above effects. Our results raise the hope of reducing persistent and unintentional forms of discrimination that arise from implicit bias.

Introduction

Despite encouraging trends suggesting that racial prejudice in the U. S. has waned in the last half century (Gaertner & Dovidio, 1986; Schuman, Steeh, Bobo, & Krysan, 1997), widespread evidence suggests that Black people face continuing discrimination and have more adverse outcomes than White people across a variety of domains related to success and well-being (e.g., Bertrand & Mullainathan, 2004; Bradford, Newkirk, & Holden, 2009; Mitchell, Haw, Pfeifer, & Meissner, 2005; Steele, 1997; Vontress, Woodland, & Epp, 2007). The paradox of persistent racial inequalities amid improving racial attitudes has led to a search for factors underlying ongoing discrimination. Several theorists have implicated implicit race biases, which are automatically activated and often unintentional, as major contributors to the perpetuation of discrimination (e.g., Devine, 1989; Fiske, 1998; Gaertner & Dovidio, 1986).

Supporting this claim, accumulating evidence reveals that implicit biases are linked to discriminatory outcomes ranging from the seemingly mundane, such as poorer quality interactions (McConnell & Leibold, 2001), to the undeniably consequential, such as constrained employment opportunities (Bertrand & Mullainathan, 2004) and a decreased likelihood of receiving life-saving emergency medical treatments (Green et al., 2007). Many theorists argue that implicit biases persist and are powerful determinants of behavior precisely because people lack personal awareness of them and they can occur despite conscious nonprejudiced attitudes or intentions (Bargh, 1999; Devine, 1989; Gaertner & Dovidio, 1986). This process leads people to be unwittingly complicit in the perpetuation of discrimination.

The reality of lingering racial disparities, combined with the empirically established links between implicit bias and pernicious discriminatory outcomes, has led to a clarion call for strategies to reduce these biases (Fiske, 1998; Smedley, Stith, & Nelson, 2003). In response, the field has witnessed an explosion of empirical efforts to reduce implicit biases (Blair, 2002). These efforts have yielded a number of easy-to-implement strategies, such as taking the perspective of stigmatized others (Galinsky & Moskowitz, 2000) and imagining counter-stereotypic examples (Blair, Ma, & Lenton, 2001; Dasgupta & Greenwald, 2001), that lead to

☆ We thank Markus Brauer and Carlie Allison for their comments on a previous version of this paper. We also thank Becky McGill, Rachel Nitzarim, Julia Salomon, and Chelsea Wenzlaff for their help in running the experiment reported in this paper. Preparation of this article was supported by NIH grant R01 GM088477.

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doi:10.1016/j.jesp.2012.06.003

substantial reductions in implicit bias, at least for a short time (i.e., up to 24 hours). These strategies yield reductions in implicit bias even though people use the strategies at the experimenter's behest, with no intention to reduce implicit bias. It is unclear, however, whether such incidental reductions in implicit bias are enduring or whether people could intentionally implement such strategies in the service of a long-term goal to reduce implicit bias.

Although there is no direct evidence about whether one-shot strategies used at another's behest could produce enduring change, some general dual-process theories in psychology (e.g., Epstein, 1994; Smith & DeCoster, 2000; Strack & Deutsch, 2004) suggest that such reductions are likely to be highly contextual and short-lived. According to these theories, implicit and explicit processes are supported by fundamentally different psychological systems. Although the explicit system can change quickly and is relatively context-independent, the implicit system is highly contextual and only changes in an enduring way after considerable time, effort, and / or intensity of experience. Thus, because one-shot interventions must counteract a large accretion of associative learning, they are unlikely to produce enduring change in the implicit system. Such change is likely only after the application of considerable goal-directed effort over time.

The preceding analysis is consistent with Devine's habit-breaking analysis of prejudice reduction, which argues that overcoming prejudice is a protracted process that requires considerable effort in the pursuit of a nonprejudiced goal (Devine, 1989; Devine & Monteith, 1993; Devine, Monteith, Zuwerink, & Elliot, 1991; Monteith, 1993). This model likens implicit biases to deeply entrenched habits developed through socialization experiences. “Breaking the habit” of implicit bias therefore requires learning about the contexts that activate the bias and how to replace the biased responses with responses that reflect one's nonprejudiced goals.

Supporting the prejudice habit-breaking framework, considerable evidence demonstrates that, when they believe they have acted with bias, people who endorse values opposed to prejudice are motivated to inhibit the expression of implicit bias by seeking out information and putting effort into tasks they believe would help them break the prejudice habit (Amodio, Devine, & Harmon-Jones, 2007; Monteith, 1993; Plant & Devine, 2009). In addition, when these people act with prejudice, they experience guilt (Devine et al., 1991), which instigates self-regulatory efforts to disrupt automatic bias and prevent future expressions of bias (Amodio et al., 2007; Monteith, 1993). Although this evidence is consistent with the prejudice habit-breaking framework, extant research has not yet examined whether interventions can produce long-term implicit bias reductions, nor has it clearly specified the type of effort required to yield such reductions. The goal of the present work is to address these shortcomings and to develop an intervention that engages intentional effort to produce enduring reductions in implicit race bias.

Multifaceted prejudice habit-breaking intervention

Devine and colleagues (Devine & Monteith, 1993; Plant & Devine, 2009) argue that the motivation to break the prejudice habit stems from two sources. First, people must be *aware* of their biases and, second, they must be *concerned* about the consequences of their biases before they will be motivated to exert effort to eliminate them. Furthermore, people need to know when biased responses are likely to occur and how to replace those biased responses with responses more consistent with their goals.

The present work synthesizes insights from the prejudice habit model and implicit bias reduction strategies to develop an intervention to help people reduce implicit biases and “break the prejudice habit”. The multifaceted nature of the present intervention has conceptual parallels to approaches in several other areas, such as health behavior change (Prochaska & Velicer, 1997), cognitive behavior therapy (Beck & Alford, 2009; Cox, Abramson, Devine, & Hollon, 2012), and the fundamentals of adult learning (Howell, 1982; Kaufman, 2003). We tested this intervention in a three-month longitudinal study, comparing a group of people who completed the intervention to a control group who did not.

To ensure situational awareness of their bias, all participants completed a measure of implicit bias and received feedback about their level of bias. People assigned to the intervention group were also presented with a bias education and training program, the goals of which were to evoke a general concern about implicit biases and train people to eliminate such biases. The education component likened the expression of implicit biases to a habit and provided information linking implicit bias to discriminatory behaviors across a wide range of settings (e.g., interpersonal, employment, health). The training component described how to apply a variety of bias reduction strategies in daily life. Because the goal of our intervention was to engage a general self-regulatory process, we did not present the strategies in separate conditions to test each strategy's relative effectiveness. Instead, the training section presented participants with a wide array of strategies, enabling participants to flexibly choose the strategies most applicable to different situations in their lives. As part of the intervention, participants were prompted to report and reflect on their strategy use in the weeks between implicit bias assessments. We predicted that only people who received the intervention would translate their situational awareness into chronic awareness of biases in themselves and in society, thereby flipping the self-regulatory switch that motivates strategy use and reduces implicit bias.

To evaluate the effectiveness of the intervention, we examined its impact on an indicator of implicit bias and a variety of explicit measures longitudinally. We used the Black–White Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) as our measure of implicit race bias. The explicit measures included established measures of racial attitudes (Brigham, 1993), the sources of one's motivation for responding without prejudice (Plant & Devine, 1998), and whether one believes one's own behavior is more biased than appropriate (Monteith & Voils, 1998). Because 90% of our sample had a pro-White bias on the Black–White IAT, the latter served as a measure of awareness of one's tendency to respond with prejudice. In addition, because the intervention included education about the adverse effects of discrimination, we developed a measure assessing concern about discrimination in society. For both the intervention and control groups, all measures were assessed prior to the intervention manipulation and at two time points after the manipulation. We also asked the intervention group participants a variety of questions immediately after the education and training program about the strategies they had learned, and, in the weeks following the administration of the intervention, we asked them some open-ended questions about their use of the strategies.

Our design has five major strengths. First, it allows us to assess the intervention's effects on a rich array of variables (implicit and explicit) that are theoretically important to the reduction of race bias. Second, it enables us to examine whether the intervention's effects on these variables persisted or changed over time. Third, we have an opportunity to evaluate whether reported strategy use is associated with reductions in implicit bias. Fourth, in the control group, we can assess whether feedback about one's level of implicit bias leads to reductions in implicit bias without a multifaceted intervention. Finally, we can examine whether any of the explicit measurements taken at two times, prior to and after the intervention manipulation, moderate the effect of the intervention on implicit bias. A moderation effect with a measure taken prior to the intervention would suggest that the construct is related to learning processes during the intervention, while a moderation effect with a measure taken after the intervention would suggest that the construct is involved in the deployment of the bias-reducing strategies. Together, these two sets of moderation analyses can yield insight into two different aspects of the bias reduction process.