

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/247331761>

# The Obama Effect: Decreasing Implicit Prejudice and Stereotyping

Article in *Journal of Experimental Social Psychology* · July 2009

DOI: 10.1016/j.jesp.2009.04.018

---

CITATIONS

46

---

READS

911

7 authors, including:



[Ashby Plant](#)

Florida State University

72 PUBLICATIONS 4,491 CITATIONS

[SEE PROFILE](#)



[William T. L. Cox](#)

University of Wisconsin–Madison

9 PUBLICATIONS 183 CITATIONS

[SEE PROFILE](#)



[Joanna Goplen](#)

Florida State University

6 PUBLICATIONS 110 CITATIONS

[SEE PROFILE](#)



[Michelle Peruche](#)

Florida State University

12 PUBLICATIONS 435 CITATIONS

[SEE PROFILE](#)

All content following this page was uploaded by [Ashby Plant](#) on 09 June 2014.

The user has requested enhancement of the downloaded file. All in-text references [underlined in blue](#) are added to the original document and are linked to publications on ResearchGate, letting you access and read them immediately.



Contents lists available at ScienceDirect

## Journal of Experimental Social Psychology

journal homepage: [www.elsevier.com/locate/jesp](http://www.elsevier.com/locate/jesp)

## FlashReports

## The Obama effect: Decreasing implicit prejudice and stereotyping

E. Ashby Plant<sup>a,\*</sup>, Patricia G. Devine<sup>b,\*</sup>, William T.L. Cox<sup>b</sup>, Corey Columb<sup>a</sup>, Saul L. Miller<sup>a</sup>, Joanna Goplen<sup>a</sup>, B. Michelle Peruche<sup>a</sup><sup>a</sup> Department of Psychology, Florida State University, P.O. Box 3064301, Tallahassee, FL 32306-4301, United States<sup>b</sup> Department of Psychology, University of Wisconsin, Madison, WI, United States

## ARTICLE INFO

## Article history:

Received 3 April 2009

Available online xxxxx

## Keywords:

Implicit prejudice  
Implicit stereotyping  
Attitude change  
Prejudice reduction

## ABSTRACT

This project explores the impact of Barack Obama's presidential campaign and the resulting high levels of exposure to a positive, counter-stereotypic Black exemplar, on prejudice and stereotyping among non-Black participants. We found dramatically decreased levels of implicit anti-Black prejudice and stereotyping as compared with bias observed previously at the same institutions and in the literature. Providing some insight why the bias was reduced, Study 1 demonstrated that participants had positive Black exemplars come to mind or anticipated that other people have positive exemplars come to mind when they thought of Black people and this was associated with low levels of racial prejudice. Our second study revealed that participants who had qualities strongly associated with Obama as a political figure (e.g., president) activated when they were primed with "Black" had lower levels of implicit prejudice. These findings indicate that the extensive exposure to Obama resulted in a drop in implicit bias.

© 2009 Elsevier Inc. All rights reserved.

When we began this project, our nation stood at the threshold of an extraordinary moment in history. As the Democratic primary season unfolded, it became clear that Barack Obama would be the first African American to win a major political party's nomination for the US presidency. His nomination followed one of the longest primary races in history, a race with unprecedented media coverage. During the many months of the primary and the presidential campaign, Americans were treated to high levels of exposure to Obama, whose qualities – well educated, motivated, articulate – contradict the negative stereotypes of African Americans. We became interested in what effect such widespread exposure to a positive, counter-stereotypic exemplar might produce.

Our interest deepened when a study we conducted during the 2008 Democratic primary that included measures of implicit racial prejudice and stereotyping failed to replicate the oft-replicated finding in the literature whereby non-Black respondents show substantial anti-Black bias on the Implicit Association Task (IAT) (e.g., Amodio & Devine, 2006; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Greenwald, McGhee, & Schwartz, 1998). Typically, the vast majority of Whites, usually 75–85%, show anti-Black bias (Banaji, 2005). In stark contrast, we failed to observe anti-Black bias among 74 White participants' average scores on either the evaluative IAT ( $D$ -score  $M = .03$ ,  $SD = .44$ ), or the stereotyping IAT ( $D$ -score  $M = .01$ ,  $SD = .39$ ), (neither differed from 0,  $t$ 's < 1).

Further, 45% of participants showed negative  $D$ -scores (indicating pro-Black bias) on the evaluative race IAT compared to previous work that found only 7% of White participants responded with negative  $D$ -scores in a sample of over 85,000 (Banaji, 2005).

Could Obama's historic campaign and the concomitant level of media exposure influence the ideas and feelings that come to mind when people thought of African Americans and affect levels of implicit prejudice and stereotyping? Supporting this possibility, recent theorizing proposes that changes in implicit attitudes result from modifications in the characteristics associated with social groups that can occur following exposure to counter-stereotypic group members, including mass media exposure (Conrey, Sherman, Gawronski, Hugenberg, & Groom, 2005; Gawronski & Bodenhausen, 2006). For example, Dasgupta and Greenwald (2001) found that participants exposed to a series of well-known positive Black exemplars (e.g., Martin Luther King) and negative White exemplars (e.g., Al Capone) responded with less racial bias compared with control participants (also see Blair, Ma, & Lenton, 2001; Dasgupta & Asgari, 2004; Dasgupta & Rivera, 2008). There is also evidence that implicit attitudes are influenced by people's perceptions of the attitudes of those around them. Sinclair, Lowery, Hardin, and Colangelo (2005), for example, found that when an experimenter's t-shirt promoted egalitarianism, implicit prejudice was reduced if participants liked the experimenter (also see Lowery, Hardin, & Sinclair, 2001). It is possible, therefore, that the success of Obama's campaign and citizens' personal advertising (e.g., Obama t-shirts and signs) may have led people to perceive that others favor Obama and, perhaps by extension, that others endorse non-prejudiced beliefs. Together, these processes may produce a reduction in implicit prejudice.

\* Corresponding authors.

E-mail addresses: [plant@psy.fsu.edu](mailto:plant@psy.fsu.edu) (E.A. Plant), [pgdevine@wisc.edu](mailto:pgdevine@wisc.edu) (P.G. Devine).

We hypothesized that the salience of Obama created through the media blitz and strong support for his candidacy was responsible for the reduced levels of implicit stereotyping and prejudice. Hence during the Fall of 2008 when Obama was the Democratic presidential nominee and the publicity for the campaign was intense, we conducted two studies to examine whether we replicated the low level of implicit bias and whether the level of implicit bias was related to factors indicating that the bias reduction resulted from exposure to Obama. Indeed, the campaign provided a naturally occurring event during which the impact of exposure to a prominent counter-stereotypic exemplar could be examined. In Study 1, we examined whether the degree of implicit bias was related to the extent to which Obama as well as other positive exemplars were highly accessible when people thought of Black people. We also examined what participants anticipated comes to mind for others when they think of African Americans to explore social tuning effects. We hypothesized that having positive Black exemplars highly accessible in one's mind would be related to lower levels of implicit prejudice and stereotyping.

We also posited that if exposure to Obama produced a change in the pattern of associations activated when encountering Black people, then the social category "Black" should activate qualities associated with Obama; further, activation of these qualities should be associated with low implicit bias. Therefore, in Study 2, we examined whether qualities strongly associated with Obama as a political figure (e.g., government, leader) were activated when primed with "Black" and whether activation of these qualities was related to the level of implicit prejudice.

## Study 1

### Participants and procedure

Two hundred and twenty-nine students (64% female; 80% White) at a Midwestern university participated for course extra-credit. Participants completed evaluative and stereotyping IATs (Amodio & Devine, 2006) in counterbalanced order. On the evaluative IAT, Black and White faces are sorted according to race and words (e.g., love, evil) were sorted according to valence (i.e., pleasant/unpleasant). On the stereotyping IAT, the valence words were replaced with words that reflect "mental" and "physical" categories (e.g., brainy, run).

Participants then listed the first five thoughts that came to mind when they thought of Black people and the first five thoughts they anticipated come to other people's minds when they think of Black people. We recorded whether Obama and other positive exemplars were listed (e.g., Martin Luther King). Participants also rated their likelihood of voting for Obama on a 1 (highly unlikely) to 7 (highly likely) scale.

## Results

*D*-scores (Greenwald, Nosek, & Banaji, 2003) were created for both IATs. Consistent with the preliminary study, we failed to observe anti-Black bias on either the evaluative IAT *D*-score ( $M = .03$ ,  $SD = .50$ ) or the stereotyping IAT *D*-score ( $M = -.03$ ,  $SD = .38$ ) and neither was significantly different from zero,  $t(229) = .81$ ,  $p = .42$  and  $t(229) = -1.07$ ,  $p = .28$ , respectively. These findings stand in stark contrast to prior work that has consistently found evaluative and stereotype IAT scores significantly greater than zero (see Table 1), indicating implicit bias against Blacks (e.g., Amodio & Devine, 2006; Devine et al., 2002; Greenwald et al., 1998).<sup>1</sup>

<sup>1</sup> In both studies, we found that levels of explicit prejudice, measured via feeling thermometers and the Attitudes toward Blacks Scale (Brigham, 1993), were equivalent to previous levels.

To examine whether thoughts of positive exemplars were associated with participants' implicit responses, we conducted regression analyses with the positive exemplar variable, likelihood of voting for Obama, and gender as predictors. Analysis of the evaluative IAT revealed that participants who listed a positive exemplar on either list were less likely to respond with anti-Black bias,  $\beta = -.17$ ,  $t(226) = -2.52$ ,  $p = .01$ . Similarly, for the stereotyping IAT, participants who listed a positive exemplar responded with less implicit stereotyping,  $\beta = -.15$ ,  $t(226) = -2.20$ ,  $p = .03$ .

## Study 2

Consistent with our preliminary study, Study 1 revealed unusually low levels of implicit prejudice and stereotyping as well as initial evidence that the reduction of implicit bias is due to participants' increased accessibility of positive Black exemplars. Study 2 was designed to examine whether decreases in implicit prejudice resulted from increased associations between Black people and traits associated with Obama as a political figure. Thus, participants performed a lexical decision task (LDT) assessing the strength of association between Black primes and government-related words.<sup>2</sup> In this study, participants completed only the evaluative IAT because the stereotyping IAT would have been redundant with the LDT. We predicted that increased accessibility of government-related words following a Black prime would be associated with decreased implicit prejudice.

### Methods

Seventy-nine students (68% female, 85% White) at a Southern university participated for course-credit. Participants completed the evaluative IAT, the LDT, and a questionnaire. The trials of the LDT presented one of three primes ("Black", "White", or "XXXXX") for 55 ms followed by a mask and then one of 18 target words or 18 non-words (Dovidio, Evans, & Tyler, 1986). Target words included government-related (e.g., government, president, politician), crime-related (e.g., criminal), or neutral (e.g., vehicle) words. Crime-related target words were included because criminality is a common stereotype of Black Americans (Devine & Elliot, 1995). The questionnaire assessed participants' likelihood of voting for Obama as in Study 1 and whether they believed Obama's nomination had positively influenced their attitudes toward Black people on a 1 (strongly disagree) to 9 (strongly agree) scale.

## Results and discussion

Contrary to the preliminary study and Study 1, there was some evidence of anti-Black bias on the evaluative IAT (*D*-score  $M = .19$ ,  $SD = .20$ )  $t(76) = 8.27$ ,  $p < .001$ . To determine if this level of bias was lower than previous IAT scores measured at the same institution, we merged these data with data collected during the Fall of 2006 ( $n = 41$ ). The analysis revealed a sizable drop in *D*-scores (from .56 to .19),  $t(117) = 6.56$ ,  $p < .001$ ,  $d = 1.16$ , suggesting that although the *D*-scores differed significantly from 0, they were substantially lower than scores obtained just two years prior.

Next we examined whether implicit prejudice was related to activation of government-related words when primed with "Black". Participants' *D*-scores were regressed on the latency to respond to government words following the "Black" prime. The likelihood of voting for Obama, belief that Obama had changed their attitudes, latency to government words following the "White"

<sup>2</sup> Fourteen undergraduates listed the first three words that came to mind when they thought of Barack Obama. Government-related words (e.g., president, leader) were tied with "Black" as the most frequently occurring.

**Table 1**  
IAT *D*-scores from Amodio and Devine (2006) Studies 1–3 and Study 1 of the present project.

|   | Amodio and Devine (2006) |          |          | Present work      |           |
|---|--------------------------|----------|----------|-------------------|-----------|
|   | Study 1                  | Study 2  | Study 3  | Preliminary study | Study 1   |
| Mean eval <i>D</i> -score ( <i>SD</i> Eval) | .51(.42)                 | .32(.17) | .38(.29) | .03(.44)          | .03(.50)  |
| Mean ster <i>D</i> -score ( <i>SD</i> Ster) | .17(.43)                 | .29(.23) | .15(.18) | .01(.39)          | –.03(.38) |

prime, and latency to neutral words were included as covariates. The analysis revealed that participants who responded more quickly to government-related words when primed with Black responded with less implicit prejudice,  $\beta = -.59$ ,  $t(47) = -2.87$ ,  $p = .006$ . In addition, if the analyses were conducted with the latency to the crime-related words instead of the government-related words, there was no impact of the crime-related latencies on the *D*-scores, indicating the effect was specific to the government-related words.

### General discussion

The goal of this project was to explore whether Obama's historic presidential campaign and the resulting high levels of exposure to a positive, counter-stereotypic Black exemplar led to reduced racial prejudice and stereotyping. We found dramatically decreased levels of implicit prejudice (Studies 1 and 2) and stereotyping (Study 1) compared with previously observed levels of bias at our own institutions and in the literature more generally. Providing some insight into why the bias was reduced, Study 1 demonstrated that the tendency to have positive Black exemplars come to mind or anticipate that other people had these positive exemplars come to mind when they thought of Black people was associated with low levels of racial prejudice. Study 2 found that participants who had an increased activation of qualities associated with Obama as a political figure when primed with "Black" had lower levels of implicit prejudice. The significance of these findings is potentially extraordinary. Obama's meteoric rise to fame and success provided a naturally occurring sequence of events whereby a counter-stereotypic Black individual's rise to prominence seems to have influenced the underlying associations at least some people carry around in their minds about Black people.

The reduction in implicit racial bias we observed could have a range of encouraging implications. Historically, these negative biases led to prejudiced responses on behaviors that are not easily controllable, behaviors that contribute to the perpetuation of prejudice (Devine, 1989; Dovidio, Kawakami, & Gaertner, 2002; Fazio, Jackson, Dunton, & Williams, 1995). For example, McConnell and Leibold (2001) found that anti-Black implicit prejudice was associated with avoidant non-verbal behavior (e.g., reduced eye contact, increased interpersonal distance). If implicit responses become more positive, avoidant non-verbal behaviors may be reduced and intergroup interactions may become more positive. Additionally, intergroup interactions may become less draining for both majority group members, for whom the need to control bias may be obviated (Richeson & Shelton, 2003), and minority group members, for whom concerns about being unfairly stigmatized may be reduced (Inzlicht, McKay, & Aronson, 2006).

Though provocative and potentially very important, we note that our findings are correlational. Because the work capitalized on a naturally occurring set of events, we were unable to manipulate exposure to Obama, which, of course, would have provided stronger evidence that exposure to Obama caused the drop in implicit bias. Nevertheless, we believe the pattern of findings across our studies provides compelling support for this possibility. At the same time, we encourage caution in drawing overly strong conclusions from these findings. We should note that the longevity of

these effects is unclear. It may be that, as a major political figure, he will continue to be a salient and highly activated Black exemplar. Alternatively, over time, he could be subtyped and his general impact reduced (Rothbart & John, 1985). Furthermore, it seems plausible that the success of Obama's presidency may have implications for his future role as an exemplar. If his presidency is highly successful, he would likely activate positive traits, thoughts, and feelings for most people. However, the result may be less positive should his presidency prove to be less successful.

It is also important to note that although the levels of implicit prejudice and stereotyping were much lower than in previous studies, a sizable proportion of our participants responded with anti-Black bias. Our findings suggest that these people are less likely to have positive exemplars and words related to Obama's campaign come to mind when they think of Black people. However, it is not clear why they responded in this way. Possibly, they were less exposed to the campaign's media blitz. Alternatively, the strength and stability of their racial attitudes may have resulted in resistance to change. Exploring these possibilities will be important for understanding resistance to prejudice reduction as well as the processes involved in the bias reduction we observed.

Although we observed reductions in racial bias in two distinct regions of the county, all participants were non-Black college students. It will be important to measure implicit racial bias in the more general voting public. And, although the impact of this election is likely to reverberate through citizens across the nation, it will be essential to explore the implications of Obama and his presidency for the attitudes and experiences of African Americans. Indeed, the poignancy of election night was nowhere stronger than among African Americans for whom this election may signal that possibilities previously unavailable to them are now within reach.

As we complete this project, we stand at the threshold of another extraordinary moment in history. Barack Obama has been elected the first African American president of the United States of America. The unprecedented drop in implicit bias observed in our studies indicates that the impact of Obama's historic campaign went beyond him winning the election. It appears to have produced a fundamental change in at least the minds of the American public. Although the full impact of this historic election will play out over time, we are encouraged by the early returns.

### Acknowledgments

This work was partially supported by the National Science Foundation, Grant BCS-0544598 awarded to the first author and a University of Wisconsin Kellert Mid-career Award to the second author.

### References

- Amodio, D. M., & Devine, P. G. (2006). Stereotyping and evaluation in implicit race bias: Evidence for independent constructs and unique effects on behavior. *Journal of Personality and Social Psychology*, 91(4), 652–661.
- Banaji, M. R. (2005). Mind bugs: The psychology of ordinary prejudice. Paper presented at the Midwestern Psychological Association meeting, Chicago, May.
- Blair, I. V., Ma, J. E., & Lenton, A. P. (2001). Imagining stereotypes away: The moderations of implicit stereotypes through mental imagery. *Journal of Personality and Social Psychology*, 81(5), 828–841.

- Brigham, J. C. (1993). College students' racial attitudes. *Journal of Applied and Social Psychology, 23*, 1933–1967.
- Conrey, F. R., Sherman, J. W., Gawronski, B., Hugenberg, K., & Groom, C. J. (2005). Separating multiple processes in implicit social cognition: The quad model of implicit task performance. *Journal of Personality and Social Psychology, 89*(4), 469–487.
- Dasgupta, N., & Asgari, S. (2004). Seeing is believing: Exposure to counter stereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology, 40*(5), 642–658.
- Dasgupta, N., & Greenwald, A. G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology, 81*(5), 800–814.
- Dasgupta, N., & Rivera, L. M. (2008). When social context matters: The influence of long-term contact and short-term exposure to admired outgroup members on implicit attitudes and behavioral intentions. *Social Cognition, 26*(1), 112–123.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*(1), 5–18.
- Devine, P. G., & Elliot, A. J. (1995). Are racial stereotypes really fading: The Princeton triology revisited. *Personality and Social Psychology Bulletin, 21*(11), 1139–1150.
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality and Social Psychology, 82*(5), 835–848.
- Dovidio, J. F., Evans, N., & Tyler, R. B. (1986). Racial stereotypes: The contents of their cognitive representations. *Journal of Experimental Social Psychology, 22*(1), 22–37.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology, 82*(1), 62–68.
- Fazio, R. H., Jackson, J., Dunton, B., & Williams, C. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*, 1013–1027.
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change. *Psychological Bulletin, 132*(5), 692–731.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*(6), 1464–1480.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*(2), 197–216.
- Inzlicht, M., McKay, L., & Aronson, J. (2006). Stigma as ego depletion: How being the target of prejudice affects self-control. *Psychological Science, 17*(3), 262–269.
- Lowery, B. S., Hardin, C. D., & Sinclair, S. (2001). Social influence effects on automatic racial prejudice. *Journal of Personality and Social Psychology, 81*(5), 842–855.
- McConnell, A. R., & Leibold, J. M. (2001). Relations among the implicit association test, discriminatory behavior, and explicit measures of racial attitudes. *Journal of Experimental Social Psychology, 37*, 435–442.
- Richeson, J. A., & Shelton, J. N. (2003). When prejudice does not pay: Effects of interracial contact on executive function. *Psychological Science, 14*(3), 287–290.
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues, 41*(3), 81–104.
- Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology, 89*(4), 583–592.