Positive Emotions and the Social Broadening Effects of Barack Obama

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Past experiments have demonstrated that the cognitive broadening produced by positive emotions may extend to social contexts. Building on this evidence, we hypothesized that positive emotions triggered by thinking about Barack Obama may broaden and expand people’s sense of self to include others. Results from an expressive-writing study demonstrated that African American college students prompted to write about Obama immediately prior to and after the 2008 presidential election used more plural self-references, fewer other-references, and more social references. Mediation analyses revealed that writing about Obama increased positive emotions, which in turn increased the likelihood that people thought in terms of more-inclusive superordinate categories (we and us rather than they and them). Implications of these findings for the role of positive emotions in perspective-taking and intergroup relations are considered.

Keywords: Obama, positive emotions, self–other overlap, social broadening

Today is a day that I will remember for the rest of my life. I will remember and pinpoint the exact minute that I learned that Obama became president. Today is a day of both pride and awe for me. I am proud because I feel that we have come so far. I am awestruck by the magnitude this will have on history. Sixty years ago, this event would have been unheard of. A black president!—Participant

As the quote above poignantly illustrates, the election of Barack Obama as the nation’s first African American president was a turning point in American history. In a presidential election marked by discord and division, Barack Obama campaigned on hope, social inclusiveness, and the promise of change. Early polling in the days after the election found that 69% of Americans reported feeling hopeful, and 65% said the president makes them feel proud (Pew Charitable Trusts, 2008). When asked about what the election meant for African Americans in the United States, over two thirds of Americans indicated that Barack Obama’s ascendency to the White House is either the most important advance for African Americans in the past 100 years, or among the two or three most important of such advances (Gallup News Service, 2008).

Barack Obama’s election has been heralded as having a host of implications for African Americans. In fact, empirical investigations conducted in the immediate aftermath of Obama’s victory suggested the possibility of an “Obama effect” on African Americans’ standardized test performance (Marx, Ko, & Friedman, 2009; but see Aronson, Jannone, McGlone, & Johnson-Campbell, 2009) and racial identity (Fuller-Rowell, Burrow, & Ong, 2011). Recent work also suggests that priming Obama results in a decrease in implicit prejudice of Whites toward African Americans (Columb & Plant, 2011; Plant et al., 2009). Nevertheless, other studies reveal that despite Obama’s election, racial biases show little evidence of change (Kaiser, Drury, Spalding, Cheryan, & O’Brien, 2009; Schmidt & Nosek, 2010).

Although empirical evidence points both to positive and negative changes in intergroup attitudes that follow from making Obama salient to White Americans (Lybarer & Monteith, 2011; Pyszczynski, Henthorn, Motyl, & Gerow, 2010), to our knowledge no previous studies have directly examined whether priming Obama could result in changes in social perception among African Americans. Given Barack Obama’s ability to evoke positive emotions such as hope and pride, as well as his highly publicized message of inclusion and social unity, one could reasonably predict that individuals primed to think about Obama might respond with increased positive emotions and perspective-taking in social situations.

The possibility that thinking about Obama could cue positive feelings, which in turn lead to social broadening\(^1\) or an expansion of peoples’ sense of self to include others, is suggested by both theory and research on the cognitive benefits of positive emotions. For example, the broaden-and-build theory (Fredrickson, 1998, 2001) posits that positive emotions can broaden the scope of attention and perception. Supportive evidence for this prediction

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\(^1\) We use the term African American to refer to people of African descent who reside in the United States.

\(^2\) Although our use of the term broadening is compatible with the interpretation that positive emotions lead to more flexible, broad-minded thinking, we note that such flexibility is not limited to a broadened perspective, but may also involve the ability to generate narrow categorizations of material where appropriate (for a discussion, see Isen, 2008).
comes from decades of experimental research (for reviews, see Ashby, Isen, & Turken, 1999; Isen, 1987, 2004; Isen & Erez, 2006) showing that positive emotions can have a marked influence on cognitive processes, enhancing access to remote associations, which facilitate creative problem-solving across a wide range of settings. Critically, several lines of related research suggest that the broadened mindsets that accompany positive emotions may also influence social group perception. For example, people in whom positive emotions have been induced are more likely to form inclusive social categories (Isen, Niedenthal, & Cantor, 1992) and view themselves as members of a larger group (Dovidio, Gaertner, Isen, & Lowrance, 1995). Additional empirical evidence suggests that induced positive emotions promote a common in-group identity (Dovidio, Isen, Guerra, Gaertner, & Rust, 1998; Urada & Isen, & Lowrance, 2000) and can even increase trust (Dunn & Schweitzer, 2005) and reduce the salience of intergroup boundaries (Johnson & Miller, 2000). Thus, there is increasing empirical evidence that positive emotions can broaden people’s social perception, making them more likely to see connections and similarities between themselves and others.

The goal of this study was to provide a test of the social broadening hypothesis as applied to patterns of natural language use surrounding the 2008 presidential election. Given the link between positive emotion and increased perspective-taking in social situations (e.g., Dovidio et al., 1995; Waugh & Fredrickson, 2006), it is conceivable that positive emotions generated from cueing or priming Barack Obama may influence how people view themselves in relation to others. Furthermore, to the extent that people are more socially inclusive when thinking about Obama, they should be more likely to describe themselves and others as part of a larger whole. Multiple studies have shown that use of first-person plural pronouns together with social references serve as robust indicators of social integration (for reviews, see Pennebaker, 2002). Accordingly, we hypothesized that in comparison with participants instructed to write about daily activities, those prompted to write about Obama immediately prior to and after the election would use more plural self-references (e.g., we, us, our), more social references (e.g., mention of friends, family, and sharing), and fewer other-references (e.g., he, she, they, them).

Method

Participants and Design

One hundred forty African American undergraduate students (101 women) participated in this study. Ages ranged from 17 to 28 years (\(M = 19.09, SD = 1.39\)). Participants were randomly assigned to experimental and control conditions and were instructed to write for 6 consecutive days (November 3–8, 2008), 20 min per day. Participants in the experimental condition (\(n = 67\)) were instructed to write about their deepest thoughts and feelings surrounding the presidential election, “to really let go and explore your deepest emotions and thoughts about Barack Obama.” Those in the control condition (\(n = 73\)) were instructed to write in detail about their daily activities, a standard control procedure in expressive-writing studies (Pennebaker, 2002).

Procedure and Measures

The writing samples were collected via a secure Internet Web site, and participants received e-mail messages each day reminding them to access the study online. To minimize variation in reporting times, participants could only log onto the Web site between the hours of 7:00 p.m. and 12:00 a.m. After completing the study, participants were compensated up to $30 for their time: $3 for each diary entry completed, with a $12 bonus if they completed at least five of the six diary entries. Of a possible 840 person days, participants logged on and completed 597 (71%) time-stamped diary entries.

Linguistic analyses. To obtain linguistic dimensions of expressive writing, we subjected all essays to the computer-based text analysis program LIWC (Linguistic Inquiry and Word Count; Pennebaker, Francis, & Booth, 2001). The LIWC program analyzes texts on a probabilistic basis by comparing entries on a word-by-word basis with a dictionary of over 2300 words and word stems. Each word is assigned to specific linguistic categories, and the percentage of total words in each category is indexed (for a description, see Pennebaker, Francis, et al., 2001). Our analysis focused on three linguistic indicators that have been validated in previous studies: plural self-references (e.g., we, us, our), other-references (e.g., he, she, they, them), and social references (e.g., mention of friends, family, and sharing). For each of the 6 days during which writing entries were collected, we aggregated participants’ LIWC scores to derive three separate measures: plural self-references, other-references, and social references, respectively.

Emotion measures. To assess the emotionality expressed in the writing samples, we calculated a positive emotionality index as the difference between the LIWC scores for positive emotion words (e.g., happy, nice, good) and negative emotion words (e.g., worried, annoyed, sad). Higher scores indicate greater overall positive emotionality (see Cohn, Mehl, & Pennebaker, 2004). Participants also provided self-report ratings of their daily positive and negative emotions. For positive emotions, participants rated each day how joyful, proud, happy, and grateful they felt. For negative emotions, participants rated how disgusted, angry, hostile, and irritated they felt. Ratings were made on a 5-point scale, ranging from 1 (not at all) to 5 (extremely). The internal consistency reliability was .98 for mean daily positive emotions and .93 for mean daily negative emotions.

Results

To derive daily measures of expressive writing, we aggregated participants’ LIWC scores on the indicators of social broadening (plural self-references, social references, other references) and positive emotionality. Daily LIWC scores were then aggregated to form composite measures across the writing days. Similar composite measures were created for positive and negative emotion reports. The means, standard deviations, and correlations among the composite linguistic indicators and emotion reports are detailed in Table 1. Results indicated significant associations between self-reported positive emotions and LIWC scores. In contrast,

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3 We eliminated from analyses the first daily report from the observation period because the emotion reports were rated prior to the expressive writing. This resulted in a total of 5 days of data that were used in the analyses.
ratings of negative emotions were not linked to LIWC scores or ratings of positive emotions.

To determine whether the two writing conditions elicited differential levels of positive emotionality across the study period, we conducted a one-way analysis of variance (ANOVA). As predicted, participants in the Obama condition (M = 13.47) expressed greater positive emotionality in their writing than did those in the control condition (M = 7.03), F(138) = 19.26, p < .001, η² = .12. Also confirming predictions, participants reported more daily positive emotions in the Obama condition (M = 4.42) than in the control condition (M = 3.38), F(130) = 87.36, p < .001, η² = .40. In contrast, negative emotion reports did not reliably differ across conditions (F < 1, ns).

To test whether the Obama condition increased social broadening, we conducted a multivariate analysis of variance (MANOVA). As predicted, participants in the Obama condition evidenced greater overall cognitive and social engagement within the context of their expressive writing, F(3, 129) = 15.19, p < .001, Wilks’ λ = .74, η² = .26. In particular, they used more first-person plural self-references (M = 4.23) than did control participants (M = 3.19), F(1, 131) = 3.12, p = .008, η² = .02. They also used more social references (M = 31.42) than participants in the control condition (M = 21.75), F(1, 131) = 21.83, p < .001, η² = .14, and confirming this greater collective focus, expressed fewer other-references (M = 7.46) than did control participants (M = 10.12), F(1, 131) = 7.11, p < .01, η² = .05. Of note, comparisons between the experimental and control writing groups showed no differences in the overall number of words written (Ms = 236.97 and 218.90) or diaries completed (Ms = 4.39 and 4.15, ps > .40).

Having demonstrated that the pattern of expressive writing associated with the Obama condition was distinct from that associated with the control condition, we next tested the prediction that the hypothesized Obama effect would be mediated by positive emotions. A multivariate analysis of covariance (MANCOVA) tested whether controlling for participants’ self-reported positive emotions would diminish the relationship between writing condition and LIWC scores. The MANCOVA included the three LIWC indicators of social broadening as dependent measures, the self-report scale for positive emotions as a covariate, and writing condition (Obama and control) as the independent variable. Consistent with predictions, the data showed significant associations between the positive emotions covariate and increased social broadening, F(3, 127) = 34.65, p < .001, Wilks’ λ = .55, η² = .45. The original effect of writing condition, F(3, 129) = 15.19, p < .001, Wilks’ λ = .74, η² = .26, was weaker, but still significant, when positive emotion was taken into account, F(3, 127) = 8.57, p < .001, Wilks’ λ = .83, η² = .17. Univariate F values revealed that the effects of writing condition on plural references and social references were fully mediated by self-reported positive emotions (F < 1, ns).

To determine how much positive emotions mediated the writing condition difference in each dependent measure, we calculated the semipartial correlations between writing condition and LIWC scores. Consistent with the MANCOVA analyses, positive emotions explained 84% of the variance in plural self-references, 86% of the variance in social references, and 63% of the variance in other-references, respectively. The significance of these mediated effects was evaluated following the procedure outlined by Mackinnon and colleagues (Mackinnon, Lockwood, Hoffman, West, & Sheets, 2002; Mackinnon, Lockwood, & Williams, 2004). Specifically, asymmetric confidence limits (CL) were formed using the upper and lower critical values of the distribution of the product of two standard normal variables (Meeker, Cornwell, & Aroian, 1981). If zero was not in the 95% interval of the upper and lower confidence limits, we concluded that the mediation effect was statistically significant. Using this method, the lower and upper 95% confidence limits based on the distribution of the product were 0.42 and 2.34 for plural references, 4.58 and 13.15 for social references, and 0.85 and 4.34 for other references, suggesting that the mediated effect of positive emotions on each dependent measure was statistically significant. Conversely, when positive emotion was regressed on writing condition and LIWC scores simultaneously, LIWC scores remained reliable predictors (all ps < .05), but writing condition did as well (β = .59, p < .001). Thus, while positive emotions mediated the effects of Obama on social broadening, the data do not support social broadening as an intervening pathway that accounts for the effects of Obama on positive emotions.

Discussion

Results from the present study provide support for the social broadening hypothesis: Writing about Obama influences
perspective-taking in social situations by triggering increases in positive emotion. The data suggest that writing about Obama increases positive emotions, which in turn increases the likelihood that people will think in terms of more inclusive superordinate categories (e.g., we and us rather than they and them). To our knowledge, these findings stand as the first direct evidence of Obama’s role in broadening social perception.

Findings from the current work have several implications for our understanding of perspective-taking and intergroup processes. First, the findings suggest that making Obama salient may lead to an increase in perceived interpersonal closeness, resulting in people seeing more of themselves in others. As such, these results are consistent with previous work that demonstrate reductions in stereotyping and racial bias following exposure to multiple positive African American exemplars (Dasgupta & Greenwald, 2001), and Obama in particular (Columb & Plant, 2011). These results also raise important implications for role-model research with African Americans. A growing body of evidence suggests that African Americans who have been socialized with messages that emphasize cultural pride have highly accessible positive cognitions about their race (Hughes & Chen, 1997; Lesane-Brown, 2006) that are facilitative of more positive academic outcomes (Caughy, O’Campo, Randolph, & Nickerson, 2002; Neblett, Philip, Cogburn, & Sellers, 2006), higher self-esteem (Hughes et al., 2006), and greater use of approach-coping strategies in response to discrimination (Scott, 2003; Neblett et al., 2008). Future work focusing on moderators (e.g., cultural socialization) or the boundary conditions by which Obama may give rise to social broadening is therefore clearly needed. Importantly, the present findings suggest that the study of positive emotions may constitute an important route to understanding the impact of Obama (and of perhaps other positive African American exemplars) on perspective-taking and intergroup relations. Thus, inasmuch as positive emotions represent an active component of socialization messages that emphasize racial pride, the experience of positive emotions may be of critical importance for vulnerable minority youth, among whom deficits in cultural resources may foreclose opportunities for purposeful engagement with others (Ryff, Keyes, & Hughes, 2003). This hypothesis remains to be tested. Also noteworthy for future investigation is the extent to which the current findings generalize to other ethnic and racial minority groups. More generally, future studies should explore whether these effects are robust beyond the contribution of participant characteristics (e.g., education, political orientation, racial attitudes) that likely covary within university samples.

In summary, our findings extend previous experimental support for the role of positive emotions in widening the scope of the self. Whereas a large body of previous work has focused on documenting the incidental effects of positive emotion on social behavior (see Isen, 1987; Isen et al., 1992), research is increasingly moving toward examining the contextual factors implicated in the social broadening effects of positive emotion (Cohn & Fredrickson, 2006; Waugh & Fredrickson, 2006). The present study provides support for the provocative—yet previously untested—hypothesis that thinking and writing about Obama can lead to reliable increases in positive emotions, an effect that translates to people seeing the world in more socially inclusive ways.

References


