

Running Head: RACIAL AND POLITICAL ATTITUDES  
UNDER THE OBAMA ADMINISTRATION

Accepted Article

Racial Attitudes Predicted Changes in Ostensibly Race-Neutral  
Political Attitudes under the Obama Administration

KEYWORDS: prejudice; implicit attitudes; public opinion; Barack Obama

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version record](#). Please cite this article as [doi:10.1111/pops.12315](https://doi.org/10.1111/pops.12315).

**Abstract**

Past research demonstrated that racial prejudice played a significant role in the 2008 presidential election, but relatively less is known about the relationship between prejudice and public opinion throughout the Obama administration. In the present research, we examined not only whether racial attitudes were associated with evaluations of Mr. Obama and his administration, but also whether they may have influenced the development of more general political attitudes during the early years of the Obama administration. We investigated this question using panel data from a nationally representative sample of Americans interviewed between September 2008 and July 2010. Racial attitudes measured prior to the election predicted early disapproval of President Obama's handling of important issues. Early disapproval of President Obama's performance, in turn, predicted later perceptions of whether the state of the nation was improving. Further, the divergence between high-prejudice and low-prejudice individuals in their perceptions of the state of the nation became greater over time, consistent with the idea that racial attitudes were more powerfully expressed in political judgments as time passed.

Throughout Barack Obama's tenure as President of the United States, political pundits and observers claimed that both his detractors and supporters were motivated by racial attitudes (Blake, 2012; Franke-Ruta, 2009; Krugman, 2009). These claims were not unreasonable given the vast body of social psychological research that demonstrates how thoughts and feelings—such as racial prejudice—can bias one's perceptions of others, as well as studies that have specifically linked racial attitudes to evaluations of Mr. Obama. In the present research, we examined not only whether racial attitudes were associated with evaluations of Mr. Obama and his administration, but also how they may have influenced the development of more general political attitudes early in the Obama administration. Data were drawn from a large nationally representative sample of the American electorate that was surveyed on multiple occasions between 2008 and 2010. The availability of multiple waves of data permitted us to ask how the predictive power of racial attitudes unfolded after Mr. Obama assumed the presidency.

This study investigates how racial attitudes informed subsequent approval of Mr. Obama's performance as president and evaluations of the state of the nation for a set of ostensibly race-neutral issues (e.g., the economy). Consistent with existing theory and research on biased information processing and cognitive consistency (Wilson & Brekke, 1994; Festinger, 1957; Gawronski, 2012), we hypothesized that racial attitudes prior to the start of Mr. Obama's first term may have biased initial construals of him and his presidency, such that high-prejudice respondents would be more likely than low-prejudice respondents to report disapproval of Mr. Obama's job performance and, in turn, to evaluate the state of the nation more negatively. Moreover, we expected that these racially-informed political divisions would be self-reinforcing, resulting in increasing divergence over time in the political views of those with more or less favorable attitudes toward Blacks. In other words, we hypothesized that any changes in

perceptions of the state of the nation over time would differ for high- versus low-prejudice respondents, consistent with the idea that racial attitudes were more powerfully expressed in political judgments as time passed.

Why might racial prejudice have influenced evaluations of Mr. Obama's job performance? It is a well-established finding in the social psychological literature that thoughts and feelings, such as racial bias, can influence one's perceptions of others (Darley & Gross, 1983; Gawronski, Geschke, & Banse, 2003; Lepore & Brown, 1997; see Wilson & Brekke, 1994). For example, Gawronski and colleagues (2003) found that the same individual's actions were perceived more negatively when he was identified as a member of an ethnic outgroup and especially among those participants who held more negative automatic associations with that outgroup. Moreover, it seems that such biased judgments are most likely to occur in the presence of ambiguous information (Dunning & Sherman, 1997; Kunda & Sherman-Williams, 1993). Critically, the actions taken by a president, as well as the consequences of those actions, are often ambiguous stimuli. Consider, as one example, the government bailouts offered to the auto industry, financial industry, and other economic sectors early in Mr. Obama's first term. Were these actions the right or wrong thing to do? The bold moves of a decisive leader or shortsighted pandering to corporate interests? Such ambiguity may have enhanced the influence of racial biases, such that pre-existing prejudice could predict later assessments of presidential performance.

In support of this claim, many studies have already linked racial prejudice to evaluations of Mr. Obama. Attitudes toward Black Americans were predictive of voting behavior in both the 2008 and 2012 presidential elections (Finn & Glaser, 2010; Greenwald, Smith, Sriram, Bar-Anan, & Nosek, 2009; Pasek, Stark, Krosnick, Tompson, & Payne, 2014; Pasek et al., 2009;

Payne et al., 2010; Piston, 2010; Tesler, 2013; Tesler & Sears, 2010). And, individuals with higher levels of prejudice tended to evaluate Mr. Obama more negatively (Hehman, Gaertner, & Dovidio, 2011; Redlawsk, Tolbert, & McNeely, 2014; Tesler & Sears, 2010). Moreover, there are reasons to expect that racially-biased impressions of Mr. Obama should influence not only perceptions of the President, but also his policies and performance. Indeed, Tesler and colleagues found evidence of a racial spillover effect, whereby racial attitudes were increasingly associated with public opinion on various policy issues after Mr. Obama was elected (Tesler, 2012, 2015; Tesler & Sears, 2010). The mere presence of a Black president thus seems to have racialized attitudes on a number of issues.

Cognitive consistency theories (Festinger, 1957; Gawronski, 2012) also offer a more general explanation for why evaluations of Mr. Obama—whether motivated by racial attitudes or other factors—might inform perceptions of the state of the nation. In line with these theories, an individual who dislikes the president may be cognitively uncomfortable perceiving that he is successfully managing the nation. That is, disliking the president and liking his performance are dissonant beliefs; thus an individual holding such beliefs may be motivated to achieve consistency by adjusting one of those beliefs. Moreover, the inherent ambiguity of the state of the nation may invite the influence of general evaluations of Mr. Obama, whether they are driven by racial prejudice, ingroup versus outgroup political party affiliations, or a host of other factors. Consider, for example, the unemployment rate. For much of the first two years of Mr. Obama's presidency, unemployment was near 10%. That number, in and of itself, is not clearly good or bad. It could be worse (e.g., 15%), or it could be better (e.g., 5%). Nonetheless, individuals who dislike the president might use this information to conclude that the country is in bad shape economically.

The racial implications of cognitive consistency theories have been developed more specifically in theories of contemporary prejudice, including symbolic racism (Sears & Henry, 2005) and aversive racism theories (Pearson, Dovidio, & Gaertner, 2009; see also Gawronski, Peters, Brochu, & Strack, 2008). These theories posit that people can experience a clash between the motivation to adhere to egalitarian norms and negative feelings toward Black Americans. Strongly desiring both to be and to appear to others to be unprejudiced, an individual may explicitly deny negative feelings toward Blacks. Nonetheless, these feelings may be manifest in subtle ways and particularly in situations in which behavior can be justified on the basis of non-racial factors (see Norton, Vandello, & Darley, 2004). For example, an individual may experience negative feelings toward President Obama due to anti-Black affect, but, in an effort to avoid the appearance or experience of being motivated by race, attribute such feelings to other factors such as declines in the health care system or a worsened economy.

Thus, for various psychological reasons, we might expect that racial attitudes would influence political attitudes via their shared connection with Mr. Obama. In support of this claim, several studies to date have offered strong evidence that government policies are more strongly predicted by racial attitudes because of their association with Mr. Obama (Henderson & Hillygus, 2011; Knowles, Lowery, & Schaumberg, 2010; Tesler, 2012). For example, Knowles and colleagues (2010) found that prejudice was associated with opposition to health care reform only when the plan was attributed to Mr. Obama, but not when it was attributed to former President Bill Clinton (see also Tesler, 2012).

Inherent in our hypotheses and in much of the work reviewed here concerning the relationship between racial and political attitudes is the idea that the political opinions of those with more or less favorable attitudes toward Blacks may differ more now than they did

previously. For example, Tesler (2012) reported a stronger correlation between racial attitudes and health care reform opinions after Obama assumed office than was apparent in cross-sectional surveys from the previous two decades. Such evidence is consistent with the claim that these policies are now linked to Mr. Obama, a Black man, when they were not previously.

Further, there is reason to think that racial biases in the perception of information may compound themselves over time. A pattern of increasing divergence based on racial attitudes is predicted by research on self-fulfilling prophecies and perceptual confirmation, which asserts that expectancies and attitudes in general can instigate self-reinforcing spirals (see Madon, Willard, Guyll, & Scherr, 2011). From this perspective, racially-informed assessments of Mr. Obama, once established, may then serve as a source of information in evaluating the state of the nation. Those perceptions, in turn, may inform subsequent judgments of the state of the nation. As one example, a person who believes the country to be in bad shape may more negatively interpret macroeconomic indicators of the economy's performance and subsequently conclude that the country is in even worse shape. Hence, racialized differences in opinion may not be limited to an increase from the pre-Obama to the post-Obama era, but may have even occurred within individuals over the course of the Obama administration. In other words, it is reasonable to expect that racial attitudes may have seeded initial evaluations of Mr. Obama and, in turn, perceptions of the state of the nation, and set in motion self-reinforcing trajectories.

Though the cross-sectional evidence to support such a claim does exist (e.g., Tesler, 2012), there is less evidence examining this idea of a self-reinforcing trajectory (i.e., an increasing divergence of political opinions based on existing racial differences) at the micro- or individual-level (though see Tesler, 2013). Although the data available does not allow us to directly observe such recursive processes, they make a clear prediction that divergence in

political attitudes between high-prejudice and low-prejudice individuals should increase over time. By examining panel data (i.e., multiple waves of data collected from the same set of individuals), we are able to test whether the evidence is consistent with the idea of increased racialization at the individual level.

### **Method**

To examine the relations linking racial attitudes with political judgments during the Obama administration, we estimated a series of multilevel models predicting changes over time in perceived state of the nation. These analyses were designed to address three primary questions: (1) Were individuals' racial attitudes associated with their perceptions of the state of the nation? (2) Were racial attitudes associated with within-person changes in perceived national status over time? And, (3) did evaluations of Mr. Obama show evidence of mediating any association between racial attitudes and perceived state of the nation? Though we are, of course, unable to experimentally test our hypotheses, our analysis strategy allows us to demonstrate that variables measured at one point in time predicted subsequent intraindividual changes in other variables and to present findings that are consistent with the predicted causal effects.

### **Respondents and Sampling**

Data were drawn from the American National Election Studies (ANES) 2008-2009 Panel Study and 2010 Panel Recontact Study. The respondents in these studies were compensated for completing monthly Internet surveys from January 2008 through August 2009. Of those who completed any portion of the 2008-2009 ANES Panel Study, a subset was identified as eligible for the 2010 Recontact Study and asked to complete the follow-up survey in June-July 2010. (For further information on the sampling and recruitment techniques for these ANES studies, please see DeBell, Krosnick, and Lupia [2010] and DeBell, Hutchings, Jackman, and Segura



[2010].) After exclusion for missing data, the final sample size was 2,169 respondents who completed a total of 5,652 observations. All analyses described used sampling weights to correct for unequal probabilities of selection and nonresponse bias. (For additional information on missing data and the sampling weights used, please see the supporting materials available online.)

### **Key Measurements**

**Explicit prejudice.** Explicit prejudice refers to negative attitudes based on group membership that are consciously endorsed and willingly reported. For our analyses, explicit prejudice against Blacks was measured by three self-report items administered in September 2008, assessing (1) sympathy and (2) admiration for Blacks and (3) perceptions that Blacks have too much political influence, as well as two self-report items administered in October 2008, assessing warm/cold feelings toward (4) Blacks and (5) Whites. These latter two items were subtracted to create a measure of relative preference for Whites versus Blacks. Then, each measure was coded to range from 0 (minimal anti-Black prejudice) to 1 (maximal anti-Black prejudice), and the four resulting scores were averaged to produce a final index value for each respondent ( $\alpha = 0.61$ ).

The choice of these five items to create a measure of explicit prejudice was a product of which items had been administered during the same timeframe prior to the election as that of the implicit prejudice measure. Alternative or additional measures of explicit prejudice against Blacks (e.g., racial resentment [Kinder & Sanders, 1996]) were only administered after Mr. Obama had won the election. One potential concern regarding the explicit prejudice measure is the inclusion of the item regarding Blacks' political influence, as it may inflate the relationship between explicit prejudice and political judgments, thereby driving the estimated relations. To

alleviate this concern, we replicated all analyses having deleted this item from the composite ( $\alpha = 0.62$ ). In every case, while the magnitude of the explicit prejudice estimates lessened slightly, the same pattern of results was observed. In other words, the conclusions drawn are not dependent on this politically-tinged explicit prejudice item.

**Implicit prejudice.** In contrast to explicit prejudice, implicit prejudice refers to associations that occur spontaneously and exert influence on thought and behavior that may be unrecognized or unintended (Fazio & Olson, 2003; Gawronski & Bodenhausen, 2006). It is measured indirectly via procedures that are designed to capture automatic responses. By considering the joint and unique effects of explicit and implicit measures, we hoped to gain a richer understanding of the psychological phenomena and processes being assessed (Perugini, Richetin, & Zogmaister, 2010).

For our analyses, implicit prejudice was measured in September or October 2008 (date of completion determined randomly for each respondent), using the Affect Misattribution Procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005). The AMP is one of the most widely used implicit attitude measures and has displayed consistently strong predictive validity and high reliability across a range of studies (Cameron, Brown-Iannuzzi, & Payne, 2012; Payne & Lundberg, 2014). Across 48 trials, participants began by looking at a fixation point, followed by a 75 ms presentation of a photograph of a White or Black man, followed by the appearance of a Chinese ideograph for 250 ms, followed by a mask composed of black and white dots in a “noise” pattern. The mask remained on the screen until the respondent judged whether the ideograph was pleasant or unpleasant while avoiding influence of the photographs. Controlling for the proportion of unpleasant judgments that followed White faces, the proportion of unpleasant judgments that followed Black faces was treated as a measure of implicit racial

prejudice and was coded to range from 0 (no unpleasant judgments) to 1 (all unpleasant judgments) ( $\alpha = 0.90$ ).

**Mr. Obama's job performance.** Respondents were asked during May 2009 about the extent to which they approved or disapproved of President Obama's handling of the economy, U.S. relations with foreign countries, the federal government's budget deficit, and health care in the U.S. Answers were coded to range from 0 (maximal approval) to 1 (maximal disapproval) and averaged to form an index ( $\alpha = 0.92$ ).

**Perceived state of the nation.** During May 2009, July 2009, and July 2010, respondents rated how well the country was faring in the same four domains (the economy, U.S. relations with foreign countries, the federal government's budget deficit, and health care) as compared to January 2009. Responses were coded to range from 0 (much better) to 1 (much worse) and averaged to form an index score for each respondent at each wave ( $\alpha$ 's = 0.64, 0.67, 0.77).

**Control variables.** Directly after their recruitment, respondents were asked to complete a profile survey that included demographic questions. Gender, age, level of education, and household income were derived from those surveys. These control variables were included in all analyses, but coefficients are reported only for the variables that are of interest for the hypotheses tested.

Additional information concerning each of the key variables can be found in the supporting materials available online.

### **Data Analysis Plan**

To assess whether racial attitudes were associated with perceptions of the state of the nation and within-person changes in those perceptions over time, we estimated a series of multilevel models in which explicit and/or implicit racial attitudes were included as predictors of

perceived national status. A multilevel modeling approach was deemed most appropriate because the data consisted of two levels of information: repeated measurements of perceived state of the nation (Level 1) nested within individuals (Level 2). In such a nested structure, observations cannot be assumed to be independent of one another (i.e., an individual's responses from one time point to another will be highly correlated). A multilevel modeling strategy accounts for these dependencies. In all models described, time was included as a predictor variable in order to assess intraindividual changes over time in perceived state of the nation. It was coded 0 for measurements made in May 2009, and +1 for each successive one-month interval. (For model specifications, please see the supporting materials available online.)

Model 1 included explicit prejudice; Model 2 included implicit prejudice; and Model 3 included both explicit and implicit prejudice simultaneously. Considering each of these three models allowed us to observe the predictive power of explicit and implicit prejudice both independently and simultaneously. Additionally, in order to establish the incremental explanatory value of explicit and implicit racial prejudice, a controls-only model was estimated as a baseline, in which time and the demographic variables were the only predictors.

In each model, the main effect of each prejudice measure indicated its association with initial values of perceived state of the nation. In other words, those parameter estimates reflected existing differences in perceptions of the state of the nation in May 2009 among individuals with different levels of prejudice. The interactions of prejudice measures with time indicated their association with within-person changes in those perceptions over time. In other words, those parameter estimates reflected differences in the perceived national status trajectories among individuals at different levels of prejudice.

Subsequently, having observed significant associations linking racial attitudes with later perceptions of how the nation was faring, we planned to examine whether evaluations of Mr. Obama's job performance accounted for those significant associations in a manner consistent with mediation, by following recommended practices for assessing *upper-level mediation* in a multilevel model (see Kenny, Kashy, & Bolger, 1998; Krull & MacKinnon, 1999, 2001).

## Results

### Was Prejudice Associated with Perceived State of the Nation?

Whether considered independently or simultaneously, both explicit and implicit racial prejudice were associated with more negative perceptions of the state of the nation. In all models, individuals with stronger anti-Black attitudes before the 2008 election tended to believe that the country was faring more poorly in May 2009, and these differences only became stronger over time (Table 1). When both explicit and implicit prejudice were measured simultaneously, a typical individual who scored one standard deviation below the mean for explicit prejudice in 2008 was projected to rate the state of the nation .07 worse on a 0-1 scale than a similar individual who scored one standard deviation above the mean for explicit prejudice (Figure 1A). This difference was fully .12 when those same respondents were surveyed in July of 2010. A similar two standard deviation difference in implicit prejudice accounted for a difference of .02 on the state of the nation scale in May of 2009 and .07 in July of 2010 (Figure 1B). Thus, the gap in perceptions of the nation's status between high-prejudice and low-prejudice respondents increased notably between May 2009 and July 2010.

### Did Evaluations of President Obama's Job Performance Mediate the Association between Prejudice and Perceived State of the Nation?

Next, we examined whether evaluations of Mr. Obama's job performance explained the significant associations between prejudice and perceived state of the nation in a manner consistent with mediation. Thus far, we observed four relations that could have been mediated by evaluations of Mr. Obama's performance: (a) explicit and (b) implicit prejudice predicting initial perceptions of the state of the nation, and (c) explicit and (d) implicit prejudice predicting intraindividual changes in the perceived state of the nation. Across our three models, relations *a* and *c* occur twice (in Models 1 and 3), and relations *b* and *d* occur twice (in Models 2 and 3), for a total of eight possible mediational pathways. To examine each of these pathways, we fit a series of single-level models regressing evaluations of Mr. Obama's job performance on explicit and/or implicit prejudice, as well as the full set of demographic covariates. We also re-estimated the three multilevel models, including evaluations of Mr. Obama's job performance as an additional predictor.

Not surprisingly, individuals with stronger anti-Black attitudes before the 2008 election also more negatively evaluated Mr. Obama's job performance in May 2009, and respondents who were more disapproving of Mr. Obama also had more negative perceptions of the state of the nation (Figures 2 and 3). Further, the gap in perceptions of the state of the nation between those who highly approved and highly disapproved of President Obama increased between May 2009 and July 2010.

Critically, to test the significance of each of the eight possible indirect associations, we employed the Monte Carlo method for assessing mediation (see MacKinnon, Lockwood, & Williams, 2004) using a web-based utility (Selig & Preacher, 2008).

**Indirect associations: Initial values.** The indirect association of explicit prejudice with initial perceptions of the state of the nation (i.e., in May 2009) via disapproval of Mr. Obama

was significant (*estimate* = 0.193, 95% CI: [0.160, 0.228]; Figure 2A), even when controlling for implicit prejudice (*estimate* = 0.183, 95% CI: [0.148, 0.220]; Figure 2C). Similarly, the indirect association of implicit prejudice with initial state-of-the-nation perceptions via disapproval of Mr. Obama was also significant (*estimate* = 0.062, 95% CI: [0.040, 0.086]; Figure 2B), even when controlling for explicit prejudice (*estimate* = 0.022, 95% CI: [0.001, 0.043]; Figure 2C). Though these indirect associations are small, it is important to note that they have substantial explanatory power. For example, in Model 3, the proportions of the total associations of explicit and implicit prejudice with initial state-of-the-nation perceptions that are explained via disapproval of Mr. Obama's job performance are 87% and 63%, respectively.

**Indirect associations: Slopes.** The indirect association of explicit prejudice with within-person rates of change in perceived national status via disapproval of Mr. Obama's job performance was significant (*estimate* = 0.006, 95% CI: [0.004, 0.008]; Figure 3A), even when controlling for implicit prejudice (*estimate* = 0.006, 95% CI: [0.004, 0.008]; Figure 3C). The indirect association of implicit prejudice was also significant (*estimate* = 0.002, 95% CI: [0.001, 0.003]; Figure 3B), even when controlling for explicit prejudice (*estimate* = 0.001, 95% CI: [0.00003, 0.001]; Figure 3C). Again, these indirect associations have substantial explanatory power. For example, in Model 3, the proportions of the total associations of explicit and implicit prejudice with changes in perceived national status that are explained via disapproval of Mr. Obama's job performance are 60% and 14%, respectively.

### Controlling for Political Ideology

Given a known positive relationship between prejudice and conservatism (see Jost, Glaser, Kruglanski, & Sulloway, 2003; Sibley & Duckitt, 2008; but see Chambers, Schlenker, & Collisson, 2012), it is possible that the observed associations between prejudice and presidential

approval and, in turn, perceptions of the state of the nation are spurious, driven by ideology rather than attitudes toward Black Americans. In order to evaluate this possibility, we repeated the previously described analyses with the inclusion of political ideology as an additional covariate ( $N_{respondents} = 2,141$ ;  $N_{observations} = 5,587$ ; see Table 1). Political ideology was assessed in October 2008 using a 7-point scale ranging from *extremely liberal* to *extremely conservative*, then recoded to range from 0 to 1 with higher values reflecting more conservative views.

Across all three models (Models 4-6, which correspond to Models 1-3, respectively), we found the same pattern of results for racial attitudes: With one exception, explicit and implicit prejudice remained significant predictors, above and beyond ideology, of both perceived state of the nation in May 2009 and changes in those perceptions over time. Interestingly, we also found that political ideology was predictive of a similar divergence of political views over time. Those with more conservative views also believed that the country was faring more poorly in May 2009 than those with less conservative views, and that the gap between more and less conservative respondents increased between May 2009 and July 2010.

When we reevaluated the mediation pathways (as originally depicted in Figures 2 and 3) while controlling for political ideology, we found that the indirect association between prejudice and (changes in) perceptions of the state of the nation remained significant in six of eight cases. The indirect association of explicit prejudice with initial values of perceived state of the nation via disapproval of Mr. Obama was significant ( $estimate = 0.116$ , 95% CI: [0.087, 0.148]), even when controlling for implicit prejudice ( $estimate = 0.114$ , 95% CI: [0.084, 0.146]). The indirect association of explicit prejudice with changes in perceived state of the nation was also significant ( $estimate = 0.003$ , 95% CI: [0.001, 0.004]), even when controlling for implicit prejudice ( $estimate = 0.003$ , 95% CI: [0.001, 0.004]). Further, the indirect associations of implicit



prejudice with both initial values of perceived state of the nation ( $estimate = 0.027$ , 95% CI: [0.007, 0.047]) and changes in those perceptions over time ( $estimate = 0.001$ , 95% CI: [0.0001, 0.001]) were significant. However, when controlling for explicit prejudice, the indirect associations stemming from implicit prejudice were not significant (initial values:  $estimate = 0.006$ , 95% CI: [-0.013, 0.025]; slopes:  $estimate = 0.0001$ , 95% CI: [-0.0003, 0.001]). Nevertheless, it should be noted that, by evaluating implicit prejudice while controlling for explicit prejudice, this model offers a particularly stringent test. Most critically, the results as a whole suggest that our findings cannot be fully explained by the shared relationship between prejudice and political ideology.

**Evaluating alternative mediating variables.** It is also possible that the observed mediation patterns are not unique to Mr. Obama, but rather reflect his association with the Democratic Party. If so, that would suggest that these evaluations of Mr. Obama's job performance do not hinge on his race, but rather on the shared relationship between prejudice and political party affiliation. To assess the discriminant validity of evaluations of Mr. Obama's job performance as a mediating variable, we repeated the same assessments using other variables not directly linked to Mr. Obama as possible mediators. Specifically, we examined whether the associations between prejudice and perceived national status showed evidence consistent with mediation by (1) attitudes toward Vice President Joe Biden, (2) attitudes toward then Secretary of State Hillary Clinton, or (3) political party identification ( $N_{respondents} = 2,166-2,169$ ;  $N_{observations} = 5,645-5,652$ ).

Attitudes toward Mr. Biden and Ms. Clinton were each measured in May 2009 by a question that assessed liking for the target individual. Responses were coded to range from 0 (most positive) to 1 (most negative). Political party identification was measured in May 2009,

placing respondents into one of seven ordered categories. Answers were coded to range from 0 (strong Democrat) to 1 (strong Republican).

To assess indirect associations, we followed the same procedures described previously, simultaneously including evaluations of Mr. Obama's job performance and the alternative mediator in each model, as appropriate. The results, shown in Table 2, provide strong support for a unique role played by judgments of Mr. Obama. In only five out of 24 cases did the parameter estimates suggest evidence of mediation by the alternative. Most notably, four paths involving party identification produced significant results above and beyond approval of Mr. Obama's performance, the implication being that identification with the Democratic or Republican Party could also partially account for the association between racial attitudes and changes in perceptions of the state of the nation over time. Furthermore, in 23 of 24 cases, the indirect associations of explicit and implicit prejudice with the initial values and slopes through evaluations of Mr. Obama's job performance remained significant after controlling for the alternative mediators. The only exception was that, when party identification was included, the indirect association between implicit prejudice and perceptions of the state of the nation was reduced to nonsignificance for the slopes (though it remained significant for the initial values). In other words, of all potential mediating variables examined, perceptions of the president's performance showed the strongest set of evidence consistent with mediation.

### **Discussion**

In a panel study spanning most of the first two years of the Obama administration, we found that individuals with greater prejudice against Black Americans prior to the 2008 election also held more negative perceptions of the state of the nation over the course of the Obama administration. Moreover, this initial divergence in perceived state of the nation between high-

prejudice and low-prejudice individuals became greater over time. We also found evidence consistent with the idea that disapproval of Mr. Obama's job performance mediated these relationships between prejudice and perceived state of the nation. Additional analyses suggested that racial attitudes were uniquely predictive of this pattern of results even when controlling for conservatism and suggested that the indirect association between racial and political attitudes via evaluations of Mr. Obama was not solely a product of his affiliation with the Democratic Party but rather his identity as a Black American.

These results are consistent with existing research on the influence of prejudicial attitudes on person perception generally and on evaluations of Mr. Obama specifically (Gawronski et al., 2003; Hehman et al., 2011; Lepore & Brown, 1997): Those with higher levels of anti-Black prejudice may have been more likely to interpret President Obama's decisions as ineffective or even harmful to the country. That racial attitudes were also associated with more general evaluations of the state of the nation on issues that appears to be race-neutral (e.g., the economy) is consistent with a number of theoretical perspectives. First, as predicted by cognitive consistency theories (Festinger, 1957; Gawronski, 2012), consistency pressures may have inclined individuals to assess the state of the nation such that those assessments were aligned with their impressions of the president. Those who liked Mr. Obama may therefore have come to believe that the country was doing relatively well under his administration, whereas those who disliked him may have perceived the country to be doing worse. Additionally, as predicted by contemporary theories of prejudice (Pearson et al., 2009; Sears & Henry, 2005), it may have been that the desire to avoid displays of overt racism led some members of the electorate to justify negative feelings toward the nation's first Black president using more socially acceptable criticisms, such as disapproval of the policies with which he is associated. Finally, by examining

how the relationship between early racial attitudes and trajectories of political attitudes unfolded over time, these findings contribute to the literature on race and politics during the Obama era by offering evidence that the *spillover of racialization* (Tesler, 2012)—the increased racialization of political issues due to Mr. Obama’s presidency—is occurring within individuals, as well as at the national level.

Pasek and colleagues (2014) recently demonstrated that racial attitudes and evaluations of President Obama were less strongly associated in 2012 than in 2009. In other words, their research would suggest that the role of prejudice in predicting political judgments has been on the decline during Mr. Obama’s first term, as would be predicted by theories of individuation (see Fiske, Lin, & Neuberg, 1999; Fiske & Neuberg, 1990). From that perspective, with the passage of time and Mr. Obama’s prominence on the national stage, members of the American electorate might update their opinions of him such that direct evaluations of his actions overshadowed the influence of race. In contrast, the research presented here suggests that racial attitudes may have expressed themselves increasingly powerfully in political judgments as time passed. At first glance, it may seem that these two sets of findings are at odds. However, these lines of research are, in fact, asking different questions. Pasek et al.’s research was intended to examine whether later measures of prejudice and political judgments were more weakly correlated than early measures of prejudice and political judgments. This question was evaluated using cross-sectional samples and concluded that the association between concurrently measured racial and political attitudes had declined slightly over time. Our results, in contrast, employed a longitudinal within-subjects design to show that early measures of prejudice (assessed prior to the 2008 election) were more strongly associated with later political judgments (e.g., in July 2010) than with early political judgments (e.g., in May 2009).

Two potential explanations for this discrepancy are worthy of further study. Part of the explanation may lie in some additional results by Tesler (2013), who contends that political parties have become increasingly sorted on racial lines. Notably, the study by Pasek et al. controlled for contemporaneous party identification and thus may have conflated increased racial sorting with a diminished effect of race. This possibility is bolstered by evidence from some of our additional analyses, where ideology seems to play a similar role to attitudes toward the President in mediational models. A second possibility is that respondents may recognize and attempt to counteract their own racial biases when making an overtly racial decision—such as electing a president—but not when they are rendering judgments on the state of the nation, which do not seem racial.

By predicting these intraindividual trajectories of political judgments over time, racial attitudes—in the current research—may be best conceived of a distal predictor of later outcomes. Given individuals' tendencies to justify racially motivated behavior on the basis of non-racial factors (e.g., Norton et al., 2004), it is reasonable to speculate that, though initial assessments of Mr. Obama may have been strongly influenced by racial attitudes, such influence would lessen over time as more acceptable justifications (e.g., his poor handling of the economy) were recruited to take their place. From this perspective, our analyses could be conceived of as demonstrating how racial attitudes predicted the development of justifications for racially-motivated judgments over time. This would suggest that, though the link between concurrently measured racial and political attitudes may have lessened (though not disappeared), the American electorate continues to experience the lingering effects of early prejudice.

These hypothesized paths of influence among racial prejudice, presidential job approval, and perceptions of the state of the nation may have far-reaching consequences. A great deal of

research has examined judgments of presidential job approval and assessments of the state of the nation over a period of decades and has shown them to be consequential in multiple ways. For example, when presidential approval is low, Congress is more likely to resist implementing the president's agenda. And, when voters perceive the nation to be in better shape, they are more likely to vote for candidates of the incumbent party (see Krosnick et al., 2009). Thus, if pre-existing anti-Black racism influenced approval of President Obama's performance and assessments of the state of the nation, these processes may have been indirectly influencing the legislative process and subsequent electoral outcomes.

Finally, the unique additive effects of explicit and implicit prejudice in these analyses suggest that controlled and automatic evaluations might both contribute to the changes in perceptions observed. On the one hand, the parameter estimates of implicit and explicit measures were similar in direction and changed over time in similar ways, suggesting that, in their association with presidential job approval and the state of the nation, implicit and explicit attitudes reflected similar trends in anti-Black affect. On the other hand, implicit and explicit attitudes were only modestly correlated ( $r = 0.27, p < .0001$ ), and each explained unique variance when controlling for the other, suggesting that they were not redundant, but instead captured distinct variance in racial attitudes. More generally, these findings add to accumulating evidence that implicit and explicit measures of prejudice each predict meaningful variation in consequential judgments and behaviors and that jointly investigating these variables can better inform the psychological processes by which people arrive at political judgments and behaviors (Cameron et al., 2012; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Lundberg & Payne, 2014; see also Gawronski, Galdi, & Arcuri, 2015).

### **Limitations**

While the present analyses do provide support for our hypotheses, they are not without their limitations. First, though the ANES studies provide a rich dataset, their use also means that we were unable to decide in advance of the data collection which survey items would be included and when and instead had to choose among those available. For example, the items that we used to assess perceptions of the state of the nation were only asked within the same wave of data collection at three time points, ending in July 2010. It is reasonable to expect that there are boundaries to the patterns that these data show (e.g., the divergence in political views between high- and low-prejudice respondents), and yet we are unable to assess the location of those boundaries. Second, despite the longitudinal design with multiple waves of panel data and control variables, these data remain correlational. Though the results are consistent with the hypothesized set of relationships, we cannot establish causality. Nonetheless, it is clear that differences in racial attitudes were associated with other (increasingly) divisive political views among the American electorate during President Obama's first term.

### **Conclusion**

Using panel data from a nationally representative sample of Americans interviewed from September 2008 to July 2010, we found that individuals' perceptions of the state of the nation were closely related to racial attitudes measured prior to the 2008 election. Individuals low in racial prejudice reported that the country was performing less poorly throughout the first two years of the Obama presidency, whereas individuals with high racial prejudice did not perceive the same improvement. Evaluations of President Obama's job performance statistically mediated this relationship, consistent with the hypothesis that racial attitudes may have colored perceptions of his presidency and spilled over to inform perceptions of the nation more generally. Further, this initial disagreement between high- and low-prejudice individuals

appeared to amplify over time, suggesting that the American electorate may have continued to experience the ramifications of anti-Black affect long after its initial assessment. Despite the hoped-for ideal of a post-racial America, the election of the first Black President of the United States may have facilitated increased race-based divergence of political opinions.

Accepted Article



## References

- American National Election Studies. (2010). ANES 2008-2009 Panel Study [Data file]. Stanford University and the University of Michigan [producers and distributors]. Available from [http://www.electionstudies.org/studypages/2008\\_2009panel/anes2008\\_2009panel.htm](http://www.electionstudies.org/studypages/2008_2009panel/anes2008_2009panel.htm)
- American National Election Studies. (2010). ANES 2010 Panel Recontact Study [Data file]. Stanford University and the University of Michigan [producers and distributors]. Available from [http://www.electionstudies.org/studypages/2010panel\\_recontact/2010panel\\_recontact.htm](http://www.electionstudies.org/studypages/2010panel_recontact/2010panel_recontact.htm)
- Blake, A. (2012, October 25). Top Romney aide Sununu suggests Powell endorsed Obama because he's black. *The Washington Post*. Accessed at <http://www.washingtonpost.com/blogs/the-fix/wp/2012/10/25/top-romney-aide-sununu-suggests-powell-endorsed-obama-because-hes-black/>
- Cameron, C. D., Brown-Iannuzzi, J. L., & Payne, B. K. (2012). Sequential priming measures of implicit social cognition: A meta-analysis of associations with behavior and explicit attitudes. *Personality and Social Psychology Review*, *16*, 330-350. doi:10.1177/1088868312440047
- Chambers, J. R., Schlenker, B. R., & Collisson, B. (2012). Ideology and prejudice: The role of value conflicts. *Psychological Science*, *24*, 140-149. doi: 0.1177/0956797612447820
- Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology*, *44*, 20-33. doi:10.1037/0022-3514.44.1.20
- DeBell, M., Hutchings, V., Jackman, S., & Segura, G. (2010). *Methodology report and user's guide for the ANES 2010 Panel Recontact Survey*. Palo Alto, CA, and Ann Arbor, MI:

Stanford University and the University of Michigan. Available at

[http://electionstudies.org/studypages/2010panel\\_recontact/Methodology\\_Report\\_and\\_User\\_Guide\\_for\\_the\\_2010\\_ANES\\_Panel\\_Recontact\\_Survey\\_20101214.pdf](http://electionstudies.org/studypages/2010panel_recontact/Methodology_Report_and_User_Guide_for_the_2010_ANES_Panel_Recontact_Survey_20101214.pdf)

DeBell, M., Krosnick, J. A., & Lupia, A. (2010). *Methodology report and user's guide for the 2008–2009 ANES Panel Study*. Palo Alto, CA, and Ann Arbor, MI: Stanford University and the University of Michigan. Available at

[http://electionstudies.org/studypages/2008\\_2009panel/anes2008\\_2009panel\\_MethodologyRpt.pdf](http://electionstudies.org/studypages/2008_2009panel/anes2008_2009panel_MethodologyRpt.pdf)

Dunning, D., & Sherman, D. A. (1997). Stereotypes and tacit inference. *Journal of Personality and Social Psychology*, 73, 459-471. doi: 10.1037/0022-3514.73.3.459

Fazio, R., & Olson, M. (2003). Implicit measures in social cognition research: Their meaning and uses. *Annual Review of Psychology*, 54, 297–327.

doi:10.1146/annurev.psych.54.101601.145225

Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.

Finn, C., & Glaser, J. (2010). Voter affect and the 2008 U.S. presidential election: Hope and race mattered. *Analyses of Social Issues and Public Policy*, 10, 262–275. doi:10.1111/j.1530-2415.2010.01206.x

Fiske, S. T., Lin, M. H., & Neuberg, S. L. (1999). The Continuum Model: Ten years later. In S. Chaiken & Y. Trope (Eds.) *Dual process theories in social psychology* (pp. 231-254). New York: Guilford.

Fiske, S. T., & Neuberg, S. L. (1990). A continuum model of impression formation: From category-based to individuating processes as a function of information, motivation, and

- attention. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 1-74). New York: Academic Press.
- Franke-Ruta, G. (2009, September 16). Carter cites 'racism inclination' in animosity toward Obama. *The Washington Post*. Accessed at [http://voices.washingtonpost.com/44/2009/09/15/carter\\_cites\\_racism\\_inclination.html](http://voices.washingtonpost.com/44/2009/09/15/carter_cites_racism_inclination.html)
- Gawronski, B. (2012). Back to the future of dissonance theory: Cognitive consistency as a core motive. *Social Cognition, 30*, 652-668.
- Gawronski, B., Galdi, S., & Arcuri, L. (2015). What can political psychology learn from implicit measures?: Empirical evidence and new directions. *Political Psychology, 36*, 1-17. doi:10.1111/pops.12094
- Gawronski, B., & Bodenhausen, G. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change. *Psychological Bulletin, 132*, 692-731. doi:10.1037/0033-2909.132.5.692
- Gawronski, B., Geschke, D., & Banse, R. (2003). Implicit bias in impression formation: Associations influence the construal of individuating information. *European Journal of Social Psychology, 33*, 573-589. doi:10.1002/ejsp.166
- Gawronski, B., Peter, K. R., Brochu, P. M., & Strack, F. (2008). Understanding the relations between different forms of racial prejudice: A cognitive consistency perspective. *Personality and Social Psychology Bulletin, 34*, 648-665. doi:10.1177/0146167207313729
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology, 97*, 17-41. doi:10.1037/a0015575

- Greenwald, A. G., Smith, C. T., Sriram, N., Bar-Anan, Y., & Nosek, B. A. (2009). Implicit race attitudes predicted vote in the 2008 U.S. presidential election. *Analyses of Social Issues and Public Policy, 9*, 241-253. doi:10.1111/j.1530-2415.2009.01195.x
- Helman, E., Gaertner, S. L., & Dovidio, J. F. (2011). Evaluations of presidential performance: Race, prejudice, and perceptions of Americanism. *Journal of Experimental Social Psychology, 47*, 430-435. doi:10.1016/j.jesp.2010.11.011
- Henderson, M., & Hillygus, D. S. (2011). The dynamics of health care opinion, 2008-2010: Partisanship, self-interest, and racial resentment. *Journal of Health Politics, Policy, and Law, 36*, 945-960. doi:10.1215/03616878-1460533
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*, 339-375. doi:10.1037/0033-2909.129.3.339
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 233-265). New York: McGraw-Hill.
- Kinder, D. R., & Sanders, L. M. (1996). *Divided by color: Racial politics and democratic ideals*. Chicago: University of Chicago Press.
- Knowles, E. D., Lowery, B. S., & Schaumberg, R. L. (2010). Racial prejudice predicts opposition to Obama and his health care reform plan. *Journal of Experimental Social Psychology, 46*, 420-423. doi:10.1016/j.jesp.2009.10.011
- Krosnick, J. A., Visser, P. S., & Harder, J. (2009). The psychological underpinnings of political behavior. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp. 1288-1342). New York, N.Y: John Wiley.

- Krugman, P. (2009, August 6). The town hall mob. *The New York Times*. Accessed at [www.nytimes.com/2009/08/07/opinion/07krugman.html](http://www.nytimes.com/2009/08/07/opinion/07krugman.html)
- Krull, J. L., & MacKinnon, D. P. (1999). Multilevel mediation modeling in group-based intervention studies. *Evaluation Review*, *23*, 418–444.  
doi:10.1177/0193841X9902300404
- Krull, J. L., & MacKinnon, D. P. (2001). Multilevel modeling of individual and group level mediated effects. *Multivariate Behavioral Research*, *36*, 249–277.  
doi:10.1207/S15327906MBR3602\_06
- Kunda, Z. & Sherman-Williams, B. (1993). Stereotypes and the construal of individuating information. *Personality and Social Psychology Bulletin*, *19*, 90-99.  
doi:10.1177/0146167293191010
- Lepore, L., & Brown, R. (1997). Category and stereotype activation: Is prejudice inevitable? *Journal of Personality and Social Psychology*, *72*, 275–287. doi:10.1037/0022-3514.72.2.275
- Lundberg, K. B., & Payne, B. K. (2014). Decisions among the undecided: Implicit attitudes predict future voting behavior of undecided voters. *PLoS ONE* *9*(1): e85680.  
doi:10.1371/journal.pone.0085680
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, *39*, 99-128. doi:10.1207/s15327906mbr3901\_4
- Madon, S., Willard, J., Guyll, M., & Scherr, K. C. (2011). Self-fulfilling prophecies: Mechanisms, power, and links to social problems. *Social and Personality Psychology Compass*, *5*, 578-590. doi:10.1111/j.1751-9004.2011.00375.x

- Norton, M. I., Vandello, J. A., & Darley, J. M. (2004). Casuistry and social category bias. *Journal of Personality and Social Psychology, 87*, 817-831. doi:10.1037/0022-3514.87.6.817
- Pasek, J., Stark, T. H., Krosnick, J. A., Tompson, T., & Payne, B. K. (2014). Attitudes toward Blacks in the Obama era: Changing distributions and impacts on job approval and electoral choice, 2008-2012. *Public Opinion Quarterly, 78*, 276-302. doi:10.1093/poq/nfu012
- Pasek, J., Tahk, A., Lelkes, Y., Krosnick, J. A., Payne, B. K., Akhtar, O., & Tompson, T. (2009). Determinants of turnout and candidate choice in the 2008 U.S. presidential election. *Public Opinion Quarterly, 73*, 943-994. doi:10.1093/poq/nfp079
- Payne, B.K., Cheng, C. M., Govorun, O., & Stewart, B. (2005). An inkblot for attitudes: Affect misattribution as implicit measurement. *Journal of Personality and Social Psychology, 89*, 277-293. doi:0.1037/0022-3514.89.3.277
- Payne, B. K., Krosnick, J. A., Pasek, J. Lelkes, Y., Akhtar, O., & Tompson, T. (2010). Implicit and explicit prejudice in the 2008 American presidential election. *Journal of Experimental Social Psychology, 46*, 367-374. doi:10.1016/j.jesp.2009.11.001
- Payne, B. K., & Lundberg, K. B. (2014). The affect misattribution procedure: Ten years of evidence on reliability, validity, and mechanisms. *Social and Personality Psychology Compass, 8*, 672-686. doi:10.1111/spc3.12148
- Pearson, A. R., Dovidio, J. F., & Gaertner, S. L. (2009). The nature of contemporary prejudice: Insights from aversive racism. *Social and Personality Psychology Compass, 3*, 314-338. doi:10.1111/j.1751-9004.2009.00183.x

- Perugini, M., Richetin, J., & Zogmaister, C. (2010). Prediction of behavior. In B. Gawronski & B. K. Payne (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications* (pp. 255-277). New York: Guilford Press.
- Piston, S. (2010). How explicit racial prejudice hurt Obama in the 2008 election. *Political Behavior*, 32, 431-451. doi:10.1007/s11109-010-9108-y
- Redlawsk, D. P., Tolbert, C. J., & McNelly, N. A. (2014). Symbolic racism and emotional responses to the 2012 presidential candidates. *Political Research Quarterly*, 67, 680-694. doi:10.1177/1065912914531091
- Sears, D. O. & Henry, P. J. (2005). Over thirty years later: A contemporary look at symbolic racism. In Mark Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 37, pp. 95-150). San Diego, CA: Elsevier Academic Press.
- Selig, J. P., & Preacher, K. J. (2008, June). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from <http://quantpsy.org/>
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12, 248-279. doi:10.1177/1088868308319226
- Tesler, M. (2012). The spillover of racialization into health care: How President Obama polarized public opinion by racial attitudes and race. *American Journal of Political Science*, 56, 690-704. doi:10.1111/j.1540-5907.2011.00577.x
- Tesler, M. (2013). The return of old-fashioned racism to White Americans' partisan preferences in the early Obama era. *The Journal of Politics*, 75, 110-123. doi:10.1017/S0022381612000904

Tesler, M. (2015). The conditions ripe for racial spillover effects. *Political Psychology*, 36, 101-117. doi:10.1111/pops.12246

Tesler, M., & Sears, D. O. (2010). *Obama's race: The 2008 election and the dream of a post-racial America*. Chicago: University of Chicago Press.

Wilson, T. D., & Brekke, N. (1994). Mental contamination and mental correction: Unwanted influences on judgments and evaluations. *Psychological Bulletin*, 116, 117-142.

Accepted Article



## Tables

Table 1. Parameter estimates from and variance explained by multilevel models predicting perceived state of the nation.

<i>Main analyses</i>								
Estimate:	Controls-Only Model		Model 1 <i>Explicit and Controls</i>		Model 2 <i>Implicit and Controls</i>		Model 3 <i>Both and Controls</i>	
Intercept	.630***	[.577, .682]	.508***	[.450, .566]	.611***	[.559, .663]	.508***	[.449, .566]
Time	-.001	[-.006, .005]	-.008*	[-.014, -.001]	-.002	[-.008, .003]	-.007*	[-.013, -.001]
Explicit prejudice			.227***	[.176, .277]			.211***	[.158, .265]
Time-x-Explicit			.013***	[.008, .018]			.010***	[.005, .015]
Implicit prejudice					.080***	[.047, .114]	.035†	[-.001, .071]
Time-x-Implicit					.009***	[.005, .013]	.007**	[.002, .011]
<b>Variance Explained:</b>								
Intercepts (initial values)	3.76%		13.06%		6.17%		13.48%	
Slopes (changes over time)	6.60%		14.44%		14.80%		18.89%	
<i>When including political ideology as a covariate</i>								
Estimate:	Controls-Only Model		Model 4 <i>Explicit and Controls</i>		Model 5 <i>Implicit and Controls</i>		Model 6 <i>Both and Controls</i>	
Intercept	.551***	[.498, .604]	.483***	[.426, .541]	.547***	[.495, .599]	.487***	[.428, .545]
Time	-.006*	[-.011, -.0002]	-.010**	[-.016, -.004]	-.006*	[-.012, -.0004]	-.009**	[-.015, -.003]
Explicit prejudice			.144***	[.090, .198]			.137***	[.081, .193]
Time-x-Explicit			.009**	[.003, .014]			.007*	[.001, .012]
Implicit prejudice					.043*	[.010, .076]	.018	[-.017, .053]
Time-x-Implicit					.007**	[.003, .011]	.006*	[.001, .010]
Conservatism	.180***	[.154, .207]	.156***	[.129, .184]	.174***	[.148, .202]	.156***	[.128, .184]
Time-x-Conservatism	.010***	[.008, .013]	.009***	[.006, .012]	.009***	[.007, .012]	.009***	[.006, .012]
<b>Variance Explained:</b>								

## Racial and Political Attitudes under the Obama Administration 34

Intercepts (initial values)	21.32%	24.79%	22.03%	24.92%
Slopes (changes over time)	22.94%	26.09%	27.67%	29.25%

Main effects of the racial attitudes and political ideology measures indicate their associations with initial values of perceived state of the nation (i.e., in May 2009), while interactions of these measures with time indicate their associations with the slopes of perceived state of the nation. Coefficients in brackets represent 95% confidence intervals for the estimates. All models included gender, age, education, and income as additional covariates. \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , †  $p < 0.06$

**Table 2. Point estimates for the significance of the indirect associations of racial attitudes measures on perceived state of the nation via approval of Mr. Obama and (a) liking for Mr. Biden; (b) liking for Ms. Clinton; and (c) strength of political party identification.**

Predictor Variable	Mediator Variable	Models		
		Mr. Obama v. Mr. Biden	Mr. Obama v. Ms. Clinton	Mr. Obama v. Party Identification
<i>When explicit attitudes and control variables are included</i>				
Explicit Prejudice	Mr. Obama	<b>.187* [.148, .229]</b>	<b>.192* [.158, .230]</b>	<b>.189* [.155, .226]</b>
	Alternative	.008 [-.014, .031]	.001 [-.013, .016]	.006 [-.013, .024]
Time-x-Explicit	Mr. Obama	<b>.005* [.002, .009]</b>	<b>.005* [.002, .007]</b>	<b>.003* [.000, .006]</b>
	Alternative	.001 [-.001, .004]	.002 [-.000, .004]	<b>.005* [.002, .007]</b>
<i>When implicit attitudes and control variables are included</i>				
Implicit Prejudice	Mr. Obama	<b>.060* [.038, .084]</b>	<b>.062* [.039, .085]</b>	<b>.061* [.039, .084]</b>
	Alternative	.003 [-.005, .011]	.001 [-.004, .006]	.003 [-.004, .010]
Time-x-Implicit	Mr. Obama	<b>.002* [.001, .003]</b>	<b>.002* [.001, .003]</b>	<b>.001* [.000, .002]</b>
	Alternative	.000 [-.000, .001]	<b>.001* [.000, .001]</b>	<b>.002* [.001, .003]</b>
<i>When both attitude measures and control variables are included</i>				
Explicit Prejudice	Mr. Obama	<b>.177* [.138, .220]</b>	<b>.182* [.147, .221]</b>	<b>.180* [.144, .218]</b>
	Alternative	.007 [-.014, .029]	.001 [-.013, .015]	.005 [-.012, .022]
Implicit Prejudice	Mr. Obama	<b>.021* [.001, .042]</b>	<b>.022* [.001, .043]</b>	<b>.021* [.000, .042]</b>
	Alternative	.001 [-.002, .005]	.000 [-.002, .002]	.001 [-.003, .005]
Time-x-Explicit	Mr. Obama	<b>.005* [.002, .008]</b>	<b>.004* [.002, .007]</b>	<b>.003* [.001, .005]</b>
	Alternative	.001 [-.001, .003]	.002 [-.000, .004]	<b>.004* [.002, .006]</b>
Time-x-Implicit	Mr. Obama	<b>.001* [.000, .001]</b>	<b>.001* [.000, .001]</b>	.000 [-.000, .001]
	Alternative	.000 [-.000, .001]	.000 [-.000, .001]	<b>.001* [.000, .002]</b>

Coefficients in brackets represent 95% confidence intervals for the estimates. All models included gender, age, education, and income as control variables. \*  $p < 0.05$

### Figure Captions

**Figure 1. Conditional simple slopes illustrating predicted changes in perceived state of the nation over time at three levels of explicit (Panel A) and implicit (Panel B) prejudice: high (+1 SD), medium (mean), and low (-1 SD).** Based on the Model 3 estimates in which the unique associations of explicit and implicit prejudice were examined simultaneously. Controlling for gender, age, education, and income.

**Figure 2. Mediation models illustrating the associations of explicit and implicit prejudice with perceived state of the nation in May 2009 via disapproval of Mr. Obama's job performance.** Panel A shows the association between explicit prejudice and perceived state of the nation in May 2009 (Model 1). Panel B shows the association between implicit prejudice and perceived state of the nation in May 2009 (Model 2). Panel C shows the unique predictive power of explicit prejudice when controlling for implicit prejudice and vice versa (Model 3). *Indirect* refers to the estimate of the indirect association of prejudice with perceived state of the nation. All models included gender, age, education, and income as control variables. Coefficients in brackets represent 95% confidence intervals for the estimates. Coefficients in italics are values after controlling for disapproval of Mr. Obama's job performance. †  $p < 0.06$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Figure 3. Mediation models illustrating the associations of explicit and implicit prejudice with changes in perceived state of the nation via disapproval of Mr. Obama's job performance.** Panel A shows the association between explicit prejudice and changes in perceived state of the nation (Model 1). Panel B shows the association between implicit

prejudice and changes in perceived state of the nation (Model 2). Panel C shows the unique predictive power of explicit prejudice when controlling for implicit prejudice and vice versa (Model 3). *Indirect* refers to the estimate of the indirect association of prejudice with changes in perceived state of the nation. All models included gender, age, education, and income as control variables. Coefficients in brackets represent 95% confidence intervals for the estimates. Coefficients in italics are values after controlling for disapproval of Mr. Obama's job performance. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Accepted Article

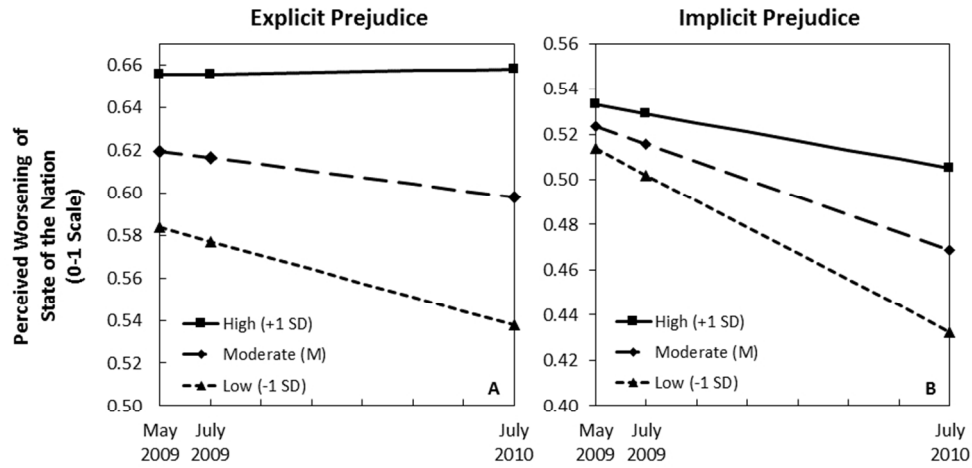


Figure 1. Conditional simple slopes illustrating predicted changes in perceived state of the nation over time at three levels of explicit (Panel A) and implicit (Panel B) prejudice: high (+1 SD), medium (mean), and low (-1 SD). Based on the Model 3 estimates in which the unique associations of explicit and implicit prejudice were examined simultaneously. Controlling for gender, age, education, and income.

Accep

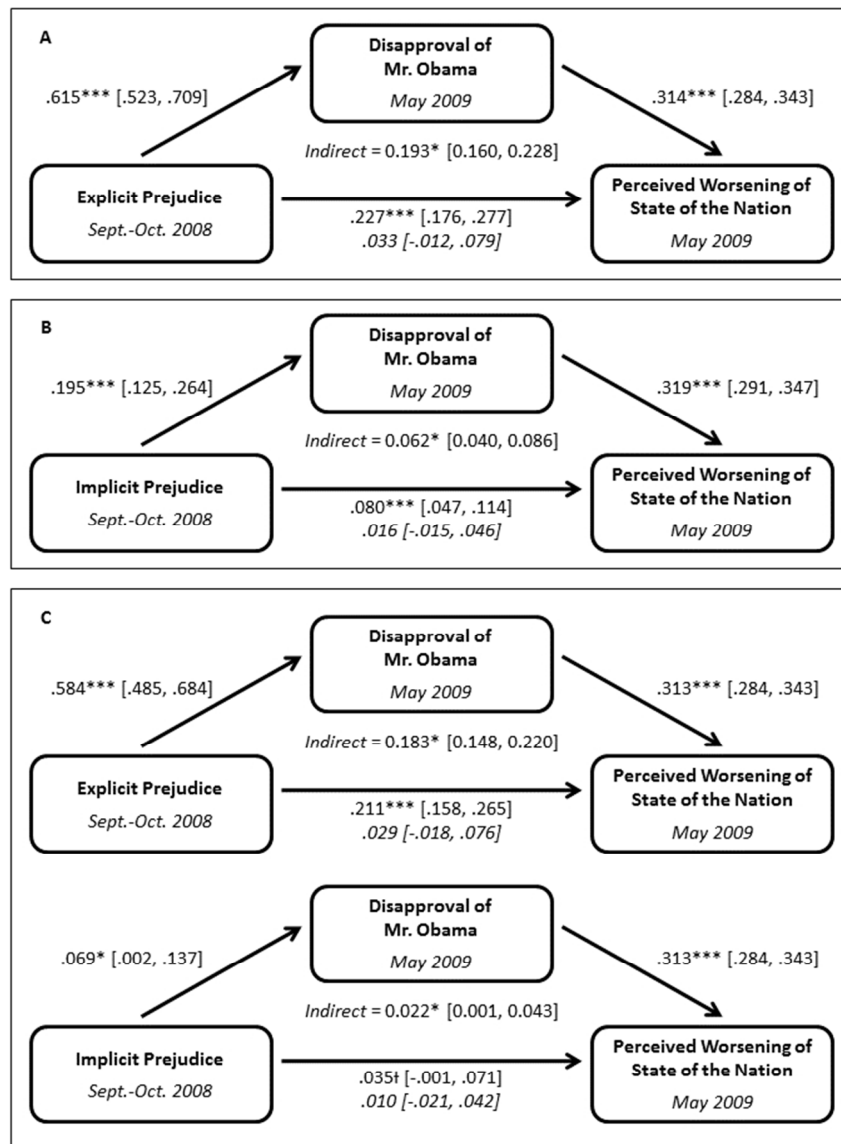


Figure 2. Mediation models illustrating the associations of explicit and implicit prejudice with perceived state of the nation in May 2009 via disapproval of Mr. Obama's job performance. Panel A shows the association between explicit prejudice and perceived state of the nation in May 2009 (Model 1). Panel B shows the association between implicit prejudice and perceived state of the nation in May 2009 (Model 2). Panel C shows the unique predictive power of explicit prejudice when controlling for implicit prejudice and vice versa (Model 3). Indirect refers to the estimate of the indirect association of prejudice with perceived state of the nation. All models included gender, age, education, and income as control variables. Coefficients in brackets represent 95% confidence intervals for the estimates. Coefficients in italics are values after controlling for disapproval of Mr. Obama's job performance. †  $p < 0.06$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

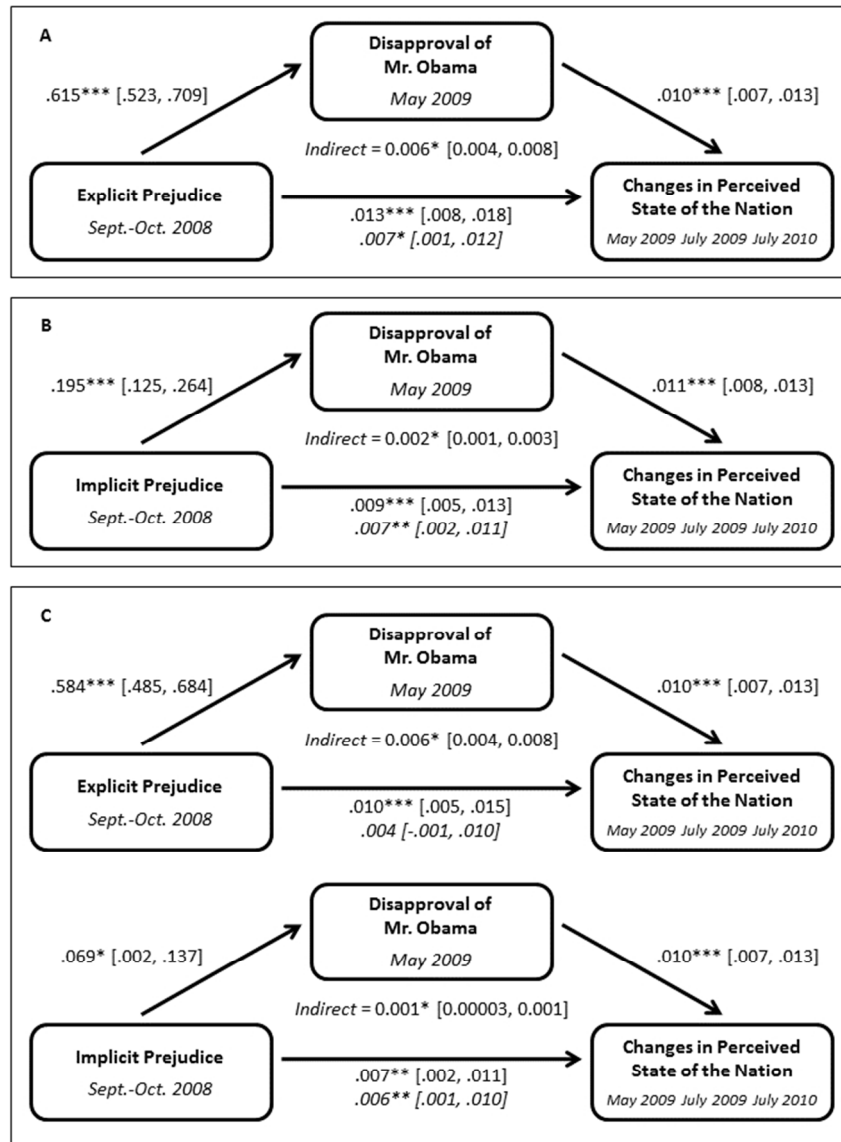


Figure 3. Mediation models illustrating the associations of explicit and implicit prejudice with changes in perceived state of the nation via disapproval of Mr. Obama’s job performance. Panel A shows the association between explicit prejudice and changes in perceived state of the nation (Model 1). Panel B shows the association between implicit prejudice and changes in perceived state of the nation (Model 2). Panel C shows the unique predictive power of explicit prejudice when controlling for implicit prejudice and vice versa (Model 3). Indirect refers to the estimate of the indirect association of prejudice with changes in perceived state of the nation. All models included gender, age, education, and income as control variables. Coefficients in brackets represent 95% confidence intervals for the estimates. Coefficients in italics are values after controlling for disapproval of Mr. Obama’s job performance. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$



## Appendix A Information Regarding Missing Data and Sampling Weights

For the analyses reported, missing data included those who failed to complete at least one of the three repeated measures of the outcome variable (perceived state of the nation) and/or who failed to complete one or more measures that serve as predictor variables (e.g., the Affect Misattribution Procedure). Note that, because a multilevel modeling approach can incorporate missing observations for the outcome variable, it was not required that participants complete all three of the repeated measures of perceived state of the nation. Under the assumption that the data are missing at random, a respondent may be included as long as (s)he has completed the outcome measure at least once (see Raudenbush & Bryk, 2002).

All analyses described used sampling weights to correct for unequal probabilities of selection and nonresponse bias. Raked weights were calculated using the *anesrake* algorithm in R (Pasek, 2010). Base weights provided by ANES were adjusted to match benchmarks from the March 2008 demographic supplement to the Current Population Survey on sex, census region, age, race/ethnicity, and educational attainment (as reported in DeBell, Krosnick et al., 2010). For each demographic variable, weighting procedures were conducted only if the variable differed from the population by an average of five percentage points (see DeBell & Krosnick, 2009). Weights were constructed such that the intersection of all individuals included in our final sample was weighted, thereby maximizing the extent to which this particular sample represented the population at large.

### Appendix A References

- DeBell, M., & Krosnick, J. A. (2009). *Computing weights for American National Election Study survey data* (ANES Technical Report series, no. nes012427). Ann Arbor, MI, and Palo Alto, CA: American National Election Studies. Available at <http://www.electionstudies.org/resources/papers/nes012427.pdf>
- DeBell, M., Krosnick, J. A., & Lupia, A. (2010). *Methodology report and user's guide for the 2008–2009 ANES Panel Study*. Palo Alto, CA, and Ann Arbor, MI: Stanford University and the University of Michigan. Available at [http://electionstudies.org/studypages/2008\\_2009panel/anes2008\\_2009panel\\_MethodologyRpt.pdf](http://electionstudies.org/studypages/2008_2009panel/anes2008_2009panel_MethodologyRpt.pdf)
- Pasek, J. (2010). *anesrake: ANES raking implementation (Version 0.70)* [Software]. Available from: <http://cran.r-project.org/web/packages/anesrake/index.html>
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods (2nd ed.)*. Thousand Oaks, CA: Sage Publications.

**Appendix B**  
**Additional Information Concerning Key Variables**

Additional information concerning each of the variables used in our analyses, including exact item wording, is available from the American National Election Studies (ANES; [www.electionstudies.org](http://www.electionstudies.org)). To facilitate the process for those who wish to explore further, the table below includes the ANES variable names and item labels.

Measure	ANES Variable Name(s)	Item
<b>Explicit Prejudice</b>	w9zb23	Blacks too much or too little political influence
	w9zb24	Sympathy for Blacks
	w9zb25	Admiration for Blacks
	w10d11-13	Warm or cold to Blacks
	w10d14-16	Warm or cold to Whites
<b>Implicit Prejudice</b>	w9amp_q2_face[X]_choice OR w10amp_q2_face[X]_choice <i>where X = 1-48</i>	Affect Misattribution Procedure
<b>Mr. Obama's Job Performance</b>	w17ws3, w17ws_a_4, w17ws_d_4	Approve or disapprove Obama handling of economy
	w17ws5, w17ws_a_6, w17ws_d_6	Approve or disapprove Obama foreign affairs
	w17ws7, w17ws_a_8, w17ws_d_8	Approve or disapprove Obama handling budget deficit
	w17ws17, w17ws_a_18, w17ws_d_18	Approve or disapprove Obama health care in U.S.
<b>Perceived State of the Nation</b>	w17u2, w19u2, f1w1	Relations with foreign countries better or worse
	w17u4, w19u4, f1w2	Federal budget deficit better or worse
	w17u9, w19u9, f1w3	Health care better or worse
	w17v1-3, w19v1-3, f1x1-3	Economy better or worse
<b>Control and Other Variables</b>	der01	Gender
	der02	Age on Election Day 2008
	der05	Educational attainment

	der06	Income
	der08w17	Party identification at wave 17 (May 2009)
	der09w10	Liberal-conservative ideology at wave 10 (Oct. 2008)
	w17e35-37	Like or dislike Hillary Clinton
	w17e68-70	Like or dislike Joe Biden

Variable names that begin with “w” or “der” were drawn from the 2008-2009 Panel Study, while those that begin with “f” were drawn from the 2010 Panel Recontact Study.

Accepted Article

### Appendix C Model Specifications

All multilevel models used the same general modeling strategy. As an example, Model 3 was specified as follows:

$$\begin{aligned}
 \text{perceivedstate}_{ij} &= \gamma_{0.0} + \gamma_{1.0}\text{time}_{ij} + \gamma_{0.1}\text{explicit}_j + \gamma_{0.2}\text{blackamp}_j + \gamma_{0.3}\text{whiteamp}_j + \gamma_{0.4}\text{female}_j \\
 &+ \gamma_{0.5}\text{highschool}_j + \gamma_{0.6}\text{somecollege}_j + \gamma_{0.7}\text{college}_j + \gamma_{0.8}\text{graduate}_j \\
 &+ \gamma_{0.9}\text{incomemissing}_j + \gamma_{0.10}\text{income25\_39}_j + \gamma_{0.11}\text{income40\_59}_j \\
 &+ \gamma_{0.12}\text{income60\_84}_j + \gamma_{0.13}\text{income85\_175}_j + \gamma_{0.14}\text{incomemorethan175}_j \\
 &+ \gamma_{0.15}\text{age}_j + \gamma_{1.1}\text{explicit}_{j\text{time}_{ij}} + \gamma_{1.2}\text{blackamp}_{j\text{time}_{ij}} + \gamma_{1.3}\text{whiteamp}_{j\text{time}_{ij}} \\
 &+ \gamma_{1.4}\text{gender}_{j\text{time}_{ij}} + \gamma_{1.5}\text{highschool}_{j\text{time}_{ij}} + \gamma_{1.6}\text{somecollege}_{j\text{time}_{ij}} \\
 &+ \gamma_{1.7}\text{college}_{j\text{time}_{ij}} + \gamma_{1.8}\text{graduate}_{j\text{time}_{ij}} + \gamma_{1.9}\text{incomemissing}_{j\text{time}_{ij}} \\
 &+ \gamma_{1.10}\text{income25\_39}_{j\text{time}_{ij}} + \gamma_{1.11}\text{income40\_59}_{j\text{time}_{ij}} + \gamma_{1.12}\text{income60\_84}_{j\text{time}_{ij}} \\
 &+ \gamma_{1.13}\text{income85\_175}_{j\text{time}_{ij}} + \gamma_{1.14}\text{incomemorethan175}_{j\text{time}_{ij}} + \gamma_{1.15}\text{age}_{j\text{time}_{ij}} \\
 &+ u_{0j} + u_{1j}\text{time}_{ij} + r_{ij}
 \end{aligned}$$

$i$  = time  $i$  (0 = May 2009, 1 = June 2009, etc.)

$j$  = person  $j$

$$r_{ij} \sim N(0, \sigma^2)$$

$$\begin{bmatrix} u_{0j} \\ u_{1j} \end{bmatrix} \sim N \left( \begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} \tau_{00} & \\ \tau_{10} & \tau_{11} \end{bmatrix} \right)$$

In this equation,  $\gamma_{0.1}$  and  $\gamma_{0.2}$  represent the total effects of explicit and implicit prejudice, respectively, on perceived state of the nation in May 2009. The parameters  $\gamma_{1.1}$  and  $\gamma_{1.2}$  represent the total effects of explicit and implicit prejudice, respectively, on the rate of change of perceived state of the nation. The demographic control variables are: gender (0=male, 1=female); education (a series of dummy-coded variables with “less than high school” as the reference group); income (a series of dummy-coded variables with “less than \$25,000/year” as the reference group); and age on Election Day (adjusted to 0=18 years of age).

It was assumed that the within-person residuals ( $r_{ij}$ ) were independent and normally distributed with mean 0 and variance  $\sigma^2$ , and that the random effects for the intercepts ( $u_{0j}$ ) and slopes ( $u_{1j}$ ) were independent and bivariate normally distributed with means of 0, variances of  $\tau_{00}$  and  $\tau_{11}$ , and a covariance of  $\tau_{10}$ .