Introduction

Today I’d like to speak to you about a gathering crisis in our society: It’s a family crisis. To some it’s hidden, concealed behind tenement walls or lost in the forgotten streets of our inner cities. With these words from a 1986 radio address, Ronald Reagan called on the nation to institute welfare reform. Describing broken families locked in a culture of poverty in America’s inner cities, Reagan’s speech remains significant for its subtle evocation of racial imagery stereotypically associated with African Americans—all while explicitly denying the specifically racial content of the message. Notably, in an interview published years later, Republican Party strategist Lee Atwater revealed this to be part of a larger, intentional strategy, an effort to keep race “on the backburner” without explicitly connecting policy positions to racial animus (Lamis 1990).

Many scholars argue that messages such as these—ones in which race is not explicitly mentioned but instead is cued through coded language or accompanying visuals—subtly connect racial prejudice to whites’ views of policies and candidates, a process commonly referred to as “dog-whistling” (Haney-López 2014; Mendelberg 2001; Valentino, Hutchings, and White 2002). Dog-whistle effects are hypothesized to be central to the way race operates in contemporary American politics, with white Americans’ latent racial prejudices brought to bear on their policy attitudes despite strong norms of egalitarianism and colorblindness in American political culture (Mendelberg 2001). A large body
of research has found that subtle elite cues harness racial prejudice and sway white Americans’ political opinions on a range of issues, including welfare (Mendelberg 1997, 2001; Peffley, Hurwitz, and Sniderman 1997), food stamps (White 2007), government spending (Valentino et al. 2002), crime (Domke 2001; Gilliam and Iyengar 2000; Hurwitz and Peffley 2005; Mendelberg 1997, 2001), and health care (Tesler 2012). Other research, however, has called into question whether implicit racial appeals are more effective than explicit appeals, including two studies employing experimental designs and large, nationally representative samples (Huber and Lapinski 2006; Valentino, Neuner, and Vandenbroek 2018). These studies suggest that racial appeals may no longer need to be implicit to engage white prejudice as explicit references to racial stereotypes may have become more socially acceptable (Valentino et al. 2018). Still other work suggests that implicit appeals may be more effective than explicit or race-neutral appeals in harnessing white prejudice but only among particular demographic groups (Hutchings, Walton, and Benjamin 2010).

So, are dog-whistle messages uniquely effective in swaying white Americans’ political opinions? And who is most likely to respond to implicit or explicit racial appeals? Here we report the results of two Internet-based survey experiments (total N = 1,797) designed to answer these questions. We test for dog-whistle effects among white participants in two policy domains—welfare and gun control—that differ in the extent and ways they have been previously racialized. Our research improves on most prior designs by measuring participants’ racial attitudes two weeks prior to inviting them to an ostensibly unrelated study in which they were presented with political messages that vary in whether the racial appeal is implicit, explicit, or not present at all. To increase external validity, the experimental manipulations feature actual political rhetoric by conservative political figures, including Ronald Reagan’s implicit racial appeal to reduce federal welfare spending quoted earlier. The results of these experiments shed light on how effective racial appeals can be, and for whom.

**The Dog-Whistle Hypothesis**

The dog-whistle hypothesis, or racial priming theory, rests on the assumption that white Americans in the post-Civil Rights era maintain conflicting and ambivalent attitudes toward racial issues, particularly those pertaining to African Americans (Hutchings and Jardina 2009; Mendelberg 2001; Valentino et al. 2002). Although whites increasingly reject old-fashioned or “Jim Crow-style” racism founded on assertions of biologically based racial difference, they continue to hold a number of negative attitudes toward African Americans, including reliance on racial stereotypes and a tendency to attribute racial inequality to individual failings of blacks (Bobo, Kluegel, and Smith 1997; Kinder and Sanders 1996; Schuman et al. 1997; Sears and Henry 2005). At the same time, whites have shown increasing support for racial egalitarianism since the Civil Rights era, including rejection of discrimination and commitment to abstract norms of racial equality (Bobo et al. 1997; Mendelberg 2001; Schuman et al. 1997). The result is a political environment where whites continue to harbor negative racial stereotypes and varying degrees of anti-minority sentiment, but strong norms of colorblindness and egalitarianism mean such attitudes are inappropriate bases of judgment or action.

In such an environment, racial priming theory (Mendelberg 2001; Valentino et al. 2002) suggests that elite appeals can harness whites’ underlying racial dispositions and prejudice to influence their policy opinions, but only when the racial content of the message remains outside conscious awareness. As an example of these dynamics, Mendelberg (1997, 2001) analyzed the impact of messages featuring the story of Willie Horton—an African American found guilty of committing assault and rape while using a weekend furlough program supported by then Massachusetts governor Michael Dukakis—in George H. W. Bush’s 1988 presidential campaign. She argues that these messages connected whites’ racial prejudice to their policy views and candidate evaluations, swaying them to favor Bush over Dukakis. Once the message was critiqued by Jesse Jackson as designed to appeal to whites’ racial anxieties, however, its efficacy in harnessing whites’ prejudice decreased, suggesting that the appeal lost its power as its racial content became recognized (Mendelberg 2001). According to the theory, racial cues must therefore be subtle and implicit, or they will be rejected as racist (Haney-López 2014; Mendelberg 2001). Examples of implicit appeals include visual presentations of racial minorities in stereotypical roles such as welfare recipient or use of racially coded language such as inner city to connect policy considerations to racial considerations without explicitly mentioning race (Hurwitz and Peffley 2005; Valentino et al. 2002).

A central hypothesis explaining how whites’ opinions on policy issues and political candidates become linked to their racial prejudices, racial priming is a topic important for understanding whites’ views on specific policy issues as well as broader changes in the American political landscape. Scholars have documented the relationship between racialized elite discourse, prejudice, and white public opinion on issues such as crime (Dixon and Linz 2000; Mendelberg 1997; Winter 2008), immigration (Hopkins 2010; Valentino, Brader, and Jardina 2013), and welfare (H. E. Brown 2013; Gilens 1999; Hancock 2004; Quadango 1994). Veiled racial appeals were an important tactic in the Republican Party’s
“Southern Strategy,” which scholars argue was key to realignment of the major political parties around issues of race in the twentieth century (Aistrup 1996; Edsall and Edsall 1992; Lamis 1990). Scholars have further argued that these appeals have been instrumental in prompting working- and middle-class voters to vote against their economic self-interest, leading to the erosion of the American welfare state (J. Brown 2016; Haney-López 2014; Quadango 1994).

Contested Evidence for the Power of Implicit Appeals

Claims that implicit racial appeals are prevalent and impactful across several areas of American politics make it important to understand whether racial priming theory is an accurate account of whites’ reactions to racialized rhetoric. As earlier scholars have noted, the balance of the literature tends to support Mendelberg (2001) and Valentino and colleagues’ (2002) account of the power of implicit racial appeals in harnessing white prejudice for political purposes (for reviews, see Huddy and Feldman 2009; Hutchings and Jardina 2009). Racially coded imagery and language increase the impact of whites’ racial attitudes on views of welfare, government spending, crime, affirmative action, and evaluations of political candidates relative to neutral imagery or language (Domke 2001; Gilliam and Iyengar 2000; Hurwitz and Peffley 2005; Mendelberg 1997, 2001; Nelson and Kinder 1996; Peffley et al. 1997; Reeves 1997; Terkildsen 1993; Valentino et al. 2002; White 2007; Winter 2008). Supporting the argument that racial appeals are ineffective if their racial content is consciously recognized, Mendelberg (2001), Valentino et al. (2002), and White (2007) found that while implicit racial appeals increase racially resentful whites’ support for a targeted issue or candidate, explicit appeals either decrease support or have no effect on whites’ attitudes.

However, other work has called into question whether explicit racial messages are less effective than implicit messages. In two large, nationally representative experiments, Huber and Lapinski (2006, 2008) found that both implicit and explicit racial cues increase the role of racial resentment in whites’ evaluations of welfare relative to race-neutral or counter-stereotypical messages, but implicit cues have no greater effect than explicit cues. They suggested racial priming theory is flawed because most Americans are not politically sophisticated enough to distinguish between implicit and explicit messages, while those whose political thinking is sufficiently sophisticated to make this distinction already bring racial considerations to bear in evaluating political issues. Therefore, neither racial appeal strengthens the (already strong) impact of racial resentment among the sub-population that distinguishes between implicit and explicit cues, whereas both appeals are equally effective among the other subpopulation. In debating the significance of these conflicting findings, Mendelberg (2008) and Huber and Lapinski (2008) each claimed that the other’s findings are methodological artifacts. For example, Mendelberg (2008) argued that Huber and Lapinski (2006) primed racial considerations for all participants by assessing their racial views shortly before exposure to the experimental prime. The possibility that these results stem from methodological differences makes this debate difficult to resolve without further empirical tests.

Recently, Valentino et al. (2018) found across four nationally representative survey experiments that implicit appeals are no more effective than explicit appeals in increasing the power of racial animus on whites’ policy preferences. They argued that this is not due to a problem in racial priming theory as it was initially formulated but rather is due to a changing political environment in which overt displays of racial prejudice have become more socially acceptable. Because their experiments are carefully constructed to avoid the pitfalls that plagued the Mendelberg (2008) and Huber and Lapinski (2008) debate, the fact that they found no difference between the effects of implicit and explicit racial appeals challenges the continuing relevance of racial priming theory, which would predict rejection of explicit appeals. However, Valentino et al. (2018) also found no difference between a neutral control condition and either of the racial appeal conditions. Although they argued that this should be expected because they were examining issues where race is already highly salient, this pattern of results leaves open the possibility that the messages they presented may have been ineffective for reasons unrelated to their racial content. In addition, implicit racial appeals could still be more effective than explicit racial appeals for policy areas where attitudes have not yet been racialized.

Finally, it is possible that individuals’ responses to implicit and explicit appeals—and the degree to which one is more effective than the other—vary depending on the norms of the communities to which they belong. For example, Hutchings et al. (2010) presented evidence that explicit racial appeals are just as effective as implicit appeals for white Southern men, a group that may not have fully internalized the norms of egalitarianism and colorblindness on which Mendelberg’s (2001) expectation of rejection of explicit messages depends. In their review piece, Hutchings and Jardina (2009:401) argued that this work as well as the debate between Mendelberg (2008) and Huber and Lapinski (2008) “highlights the need to clarify how much specific appeals matter, and for whom.”

Empirical Overview

In what follows, we test the dog-whistle hypothesis using two Internet-based survey experiments. In our first study, we conducted a pretest measuring several dimensions of participants’ racial attitudes approximately two weeks prior to the experiment. This approach offered three advantages over much prior work. By administering a survey of
racial attitudes well before the study proper, we (1) avoid the possibility that results might be driven by the explicit priming of race immediately before the experiment, as in Huber and Lapinski (2006), (2) avoid the problems of causal endogeneity associated with posttest measurements of hypothesized moderators (Montgomery, Nyhan, and Torres forthcoming), and (3) are able to more extensively and reliably measure participants’ baseline racial attitudes than most prior work, including batteries of explicit racial prejudice and racial resentment.

We then recruited participants (N = 899) to an ostensibly unrelated study in which they were presented with an implicit racial message opposing welfare programs, an explicit racial message opposing welfare programs, or a control message. To increase the real-world relevance of our findings, the implicit, explicit, and control conditions each featured real political rhetoric by actual conservative politicians or groups (Ronald Reagan, the American Freedom Party, and James Inhofe, respectively).2 Our second study mirrored the original study’s design except that the implicit and explicit messages were modified so that they represented appeals promoting stricter gun control laws. In this second study, we also measured participants’ political knowledge in our pretest to assess Huber and Lapinski’s (2006) claim that racial priming effects should occur only for those low in political knowledge, who do not distinguish between implicit and explicit appeals.

If the dog-whistle hypothesis is correct, we would expect implicit but not explicit racial appeals to increase the impact of racial resentment on whites’ policy evaluations. It is less clear, however, whether the dog-whistle hypothesis would predict that implicit appeals also can harness explicit racial prejudice. Mendelberg (2001) and Valentino et al. (2002) argued that implicit appeals connect policy attitudes to racial considerations despite white Americans’ conscious commitment to egalitarianism, but explicit prejudice represents a conscious rejection of egalitarian norms. Because racial priming theory assumes endorsement of norms that these attitudes counter-indicate, it is unclear whether we would expect implicit appeals to (1) connect whites’ policy evaluations to their explicit racial prejudice, since implicit appeals invoke racial stereotypes, however subtly, or (b) be ineffective for individuals high in explicit racial prejudice, since implicit appeals are thought to tap more unconscious racial concerns. In the following, we test these competing intuitions.

The parallel design of the studies allows us to explore how the dynamics of dog-whistle politics might vary based on the degree of prior racialization of a political issue. Whereas previous research suggests that discourse around welfare programs has long been highly racialized (e.g., Gilens 1999), racial appeals in support for stricter gun control laws are less prevalent. In addition, the messages in the second study used modified conservative rhetoric to make a racial appeal toward a liberal policy position, so that the political valence of the messages varies across studies. Finally, the racial stereotypes used to justify decreased welfare spending are distinct from those used to justify stricter gun control laws (derogatory references to black men’s work ethic and black women’s sexual morality in the former case and to black criminality in the latter). To the degree that implicit appeals connect white prejudice to policy evaluations similarly across the two experiments, this would represent evidence of dynamics generalizable across a variety of issue areas.

Study 1: The Welfare Dog Whistle

In our first study, we test whether implicit or explicit racial messages increase the impact of racial prejudice on whites’ evaluations of welfare programs. Much evidence suggests that welfare is strongly racially coded (Fox 2004; Gilens 1996, 1999; Neubeck and Cazenave 2001). Among whites, racial attitudes are stronger predictors of welfare views than economic self-interest, egalitarianism, and attributions of blame for poverty (Gilens 1995), and welfare attitudes are even more strongly associated with views of blacks than are political attitudes in other racialized domains such as crime, urban spending, and drug addiction (Wilson and Nielson 2011). In addition, experimental research finds that white Americans withdraw support for welfare when their racial status is threatened, demonstrating that the relationship between whites’ racial resentment and welfare attitudes cannot be fully accounted for in terms of principled conservatism without prejudice (Wetts and Willer 2018). Furthermore, whether implicit appeals are more effective than explicit appeals in swaying Americans’ welfare attitudes is contested in the literature. Mendelberg (2001) found that implicit appeals are more effective than explicit or race-neutral appeals in harnessing prejudice to inform Americans’ welfare attitudes, whereas Huber and Lapinski (2006) found that implicit and explicit appeals are equally effective relative to race-neutral messages. Thus, we begin our examination of the dog-whistle hypothesis with an issue area that is clearly racialized and where prior work has found conflicting evidence.

After an initial survey of racial attitudes administered about two weeks prior to the experiment, we presented participants with short political statements from conservative politicians or groups that varied in racial content. Both the implicit and explicit appeals presented arguments criticizing federal welfare programs but varied in the degree to which the racial nature of the appeal was salient. The control condition featured a conservative argument with no racial content. Because some scholars have suggested that welfare is so strongly racialized that any discussion of the issue primes racial considerations (Gilens 1996; Hurwitz and Peffley

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2Participants were not made aware of the source of the message to avoid confounding their attitudes toward these figures with their responses to the messages.
2005), this control condition discussed a separate political issue (global warming).

We then measured participants’ welfare support to test whether implicit or explicit appeals increase the influence of participants’ preexisting racial attitudes on their evaluations of welfare programs. In addition, we measured perceptions of welfare recipient deservingness to examine whether any effects appear to be driven by derogation of welfare recipients’ character when racial stereotypes are subtly or overtly cued. Finally, because prior work suggests that individuals’ responses to racial appeals may be weaker or stronger among different social groups, we explored whether dog-whistle effects may be moderated by political ideology. Given scholars’ claims that veiled racial appeals have been a key tactic in Republican Party strategy over the past century (Haney-López 2014; Lamis 1990), we might expect that conservatives are more responsive to appeals reminiscent of familiar partisan rhetoric. Alternatively, we might expect dog-whistle effects to be stronger among political liberals, a group particularly likely to have internalized norms of egalitarianism and colorblindness, thus meeting the assumptions of racial priming theory.

Method

Participants were recruited via an advertisement posted on Amazon’s Mechanical Turk (MTurk), an online marketplace where individuals complete short jobs posted by “requesters.” The MTurk participant pool, while self-selected, is more demographically diverse than the college student samples often employed in experimental research (Buhrmester, Kwang, and Gosling 2011). In addition, experiments conducted on MTurk show similar results to experiments conducted on an online platform using population-based sampling (Weinberg, Freese, and McElhattan 2014). For example, Mullinix et al. (2015) and Coppock, Leeper, and Mullinix (2018) found similar treatment effects for over 20 experiments performed on MTurk samples compared to nationally representative samples, including experiments focused specifically on how framing of political issues affects public attitudes. Studies such as these have led scholars to argue that “there is emerging consensus that MTurk is largely suitable for experimental work” (Levav, Freese, and Druckman 2016:2), while they also suggest that experimentalists can make results more robust to potential heterogeneous treatment effects by oversampling groups underrepresented on MTurk, as we do here by quota sampling on political ideology (discussed in the following).

Participants were screened with an initial demographic survey such that all participants were white U.S. residents and about one-third identified as liberal, one-third as moderate, and one-third as conservative. One thousand four hundred and ninety-five participants completed a pretest measuring demographic characteristics and racial attitudes. A total of 899 of these participants (443 men and 456 women) then participated in the main study roughly two weeks later. Participants who completed both waves of the study ranged in age from 18 to 86 years (M = 39.8, SD = 12.8), had a median household income between $40,000 and $49,999, and 50.7 percent had at least a college degree.

The pretest included standard demographic questions and two batteries of racial attitudes. Racial resentment was measured using a standard scale (Henry and Sears 2002). Participants indicated their degree of agreement with eight items on 7-point scales (e.g., “It’s really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites.”). These items were averaged to form a composite (Cronbach’s α = .92), ranging from 1 to 7. Explicit racial prejudice was measured with questions asking participants to indicate, again on 7-point scales, the degree to which they see black people as less moral and intelligent than white people and the degree to which they favor social integration between the races (e.g., “It is a bad idea for blacks and whites to marry one another.”). Again, these items were averaged to form a composite (Cronbach’s α = .84), ranging from 1 to 7.

Two weeks after the pretest, we invited participants to participate in another, apparently unrelated study. Participants were asked to read an excerpt of a politician or political party discussing a policy issue. All excerpts were presented anonymously so that participants would not know the source of the excerpt. Excerpts were all approximately equal length and featured a conservative argument but varied in whether and how they presented a racial appeal.

Participants were randomly assigned to one of three conditions. In the no racial appeal condition, participants read an excerpt from a Senate floor speech by James Inhofe in which he argued that the science behind global warming is uncertain. This excerpt contains no mentions of race or reference to racial stereotypes or images. In the implicit racial appeal condition, participants read an excerpt from Ronald Reagan’s 1986 radio address to the nation on welfare reform. In this excerpt, the racial content is limited to oblique references to racial stereotypes, such as discussion of unwed mothers in the “inner city” and descriptions of welfare programs as locking families in a “culture of poverty” (Hurwitz and Peffley 2005). The excerpt’s one explicit mention of racial groups is to indicate that the message is not specifically about African Americans (“the welfare poor, both black and white”). Therefore, any racial

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\[3\]The implicit racial appeal involves an explicit reference to race, which is somewhat at odds with how most previous studies have operationalized implicit racial appeals. However, previous scholars have also noted that mentioning race only to deny that minority groups are being specifically referenced is a rhetorical tactic common to dog-whistle messaging (e.g., Haney-López 2014). So, although this appeal does mention race, it does so in a particular style characteristic of dog-whistle messages, where these appeals have a “subtle and indirect communication style” and the racial message “appears peripheral and less objectional” (Mendelberg 2008:110).
prejudice in this message is only expressed covertly. Finally, in the explicit racial appeal condition, participants read an excerpt from the website of the American Freedom Party. Like the implicit racial appeal condition, this message similarly disparages a culture of welfare usage, but references to racial groups and racial stereotypes are explicitly stated. The message refers to blacks as being “lazy, uneducated” welfare recipients and whites as the “taxpayer base” that supports them. Therefore, racial prejudice in this message is expressed overtly. The full text of the excerpts is available in the Supplemental Material (S2A).

Next, participants’ welfare support was measured via agreement with two statements adapted from the General Social Survey: “We are spending too much money on welfare” (reverse-coded) and “Public assistance is necessary to ensure fairness in our society.” These items were averaged to form a composite (Cronbach’s $\alpha = .87$), ranging from 1 to 7.

Next, welfare recipient deservingness was measured with three items adapted from Gilens (2009) and Petersen and colleagues (2012; e.g., “Welfare recipients are generally deserving of the aid they receive.”). These items were averaged to form a composite (Cronbach’s $\alpha = .86$), ranging from 1 to 7. Finally, participants were thanked, paid, and debriefed about the study’s purpose.

Results

Thirty-four participants were excluded from analysis because they spent too little or too much time on the screen with the political appeal (less than 5 or more than 500 seconds), suggesting that they either did not read the message or had likely engaged in some other task during this time, leaving a total of 865 participants for analysis. All models reported use ordinary least squares (OLS) regression to predict participants’ attitudes.

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4One might be concerned that the use of real-world appeals meant that respondents did not perceive these messages as subtly evocative of race (in the implicit racial appeal condition) or explicitly invoking racial stereotypes (in the explicit racial appeal condition) and were instead responding to other features of the message. To alleviate this concern, we performed manipulation checks on these excerpts with a separate sample of participants (N = 180). These checks confirm that (1) the general content of the messages was understood, with more than 90% of participants correctly identifying the content of the message in all experimental conditions. In addition, (2) the implicit appeal was seen as more racialized than the control message ($p < .001$) but less racialized than the explicit appeal ($p < .001$). Finally, (3) the explicit appeal was seen as racially insensitive, whereas the implicit appeal and control messages were not ($p < .001$). See Supplemental Material (S3A) for manipulation check items and results.

5Results are substantively identical if these participants are retained in the analysis.

We first tested the effect of the implicit and explicit racial appeals on participants’ welfare support and perceptions of welfare recipients’ deservingness relative to the control condition. Participants assigned to the implicit racial appeal condition reported significantly less support for welfare than those assigned to the no racial appeal condition ($p = .02$). Participants in the explicit racial appeal condition were in between, not differing significantly from either the control condition or the implicit racial appeal condition.

In addition, participants assigned to the implicit racial appeal condition reported significantly lower levels of the view that welfare recipients are deserving of aid ($p = .02$). Again, participants in the explicit racial appeal did not report significantly higher levels of this view than participants in either the control or implicit racial appeal conditions. To test whether perceptions of welfare recipient deservingness partially mediated the effect of the implicit racial appeal on participants’ welfare attitudes, we conducted a bootstrap analysis of mediation (Preacher and Hayes 2008). The 95 percent confidence interval for the indirect effect did not include zero (lower limit = −.54, upper limit = −.04), indicating a statistically significant mediation. This offers evidence that the implicit racial appeal reduced participants’ support for welfare programs in part by leading them to view welfare recipients as less deserving.

Next, we examined whether the racial appeals increased the influence of baseline racial attitudes on participants’ welfare support. In separate models, we interacted levels of reported (1) racial resentment and (2) explicit racial prejudice with terms for the two experimental conditions containing racial appeals to predict participants’ welfare support. Results of these two models show no evidence that implicit or explicit racial appeals heighten the influence of racial dispositions on participants’ evaluations of welfare. As shown in Table 1, none of the interactions between racial attitudes and experimental condition are statistically significant.

Finally, we explored whether the racial appeals increased the influence of baseline racial attitudes among either more liberal or more conservative participants. In separate models, we interacted (1) racial resentment and (2) explicit racial prejudice with the effect of condition and dummy variables indicating whether participants identified as liberal or conservative to predict participants’ welfare support (Table 2).

Looking first at the effect of the implicit appeal, results suggest that the implicit racial appeal increased the effect of racial resentment on welfare support among liberals specifically. We find a negative three-way interaction between liberalism, racial resentment, and the implicit racial appeal condition ($p = .04$) such that liberals high in racial resentment were less supportive of welfare after reading the implicit racial appeal compared to a message with no racial appeal. Although this result was not
### Table 1. Ordinary Least Squares Regressions of Welfare Support: Effects of Experimental Condition and Racial Prejudice.

| Welfare Support Scale | Model 1: Welfare Support Predicted by Condition and Racial Resentment | Model 2: Welfare Support Predicted by Condition and Explicit Racial Prejudice |
|-----------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------|
| Implicit racial appeal| -.736* (.355)                                                       | -.679* (.303)                                                             |
| Explicit racial appeal| -.399 (.353)                                                        | -.129 (.297)                                                              |
| Racial prejudice (racial resentment or explicit racial prejudice) | -.864*** (.0613)                                                    | -.524*** (.088)                                                           |
| Implicit appeal × Racial prejudice | .081 (.086)                                                       | .155 (.122)                                                               |
| Explicit appeal × Racial prejudice | .035 (.085)                                                        | -.025 (.118)                                                              |
| Intercept              | 7.681*** (.256)                                                     | 5.404*** (.216)                                                           |
| N                     | 864                                                                 | 864                                                                       |
| R²                    | .403                                                                | .112                                                                      |

Note: “Racial prejudice” is measured as “racial resentment” in Model 1 and as “explicit racial prejudice” in Model 2. Reference category is the no racial appeal condition. Table entries are coefficients and standard errors.

* p < .05, *** p < .001.

### Table 2. Ordinary Least Squares Regressions of Welfare Support: Effects of Experimental Condition, Racial Prejudice, and Political Ideology.

| Welfare Support Scale | Model 1: Welfare Support Predicted by Condition, Ideology, and Racial Resentment | Model 2: Welfare Support Predicted by Condition, Ideology, and Explicit Racial Prejudice |
|-----------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Implicit racial appeal| -1.558* (.691)                                                                  | -1.587 (.463)                                                                          |
| Explicit racial appeal| .047 (.713)                                                                     | .075 (.484)                                                                             |
| Liberal               | .530 (.625)                                                                     | 1.780*** (.480)                                                                        |
| Conservative          | -.899 (.722)                                                                    | -.904† (.461)                                                                          |
| Racial prejudice (racial resentment or explicit racial prejudice) | -.682*** (.122)                                                               | -.187 (.131)                                                                            |
| Implicit appeal × Liberal | 1.493† (.859)                                                                  | .531 (.653)                                                                             |
| Explicit appeal × Liberal | .022 (.864)                                                                    | .251 (.663)                                                                             |
| Implicit appeal × Conservative | .814 (1.040)                                                                    | -.760 (.659)                                                                            |
| Explicit appeal × Conservative | -1.729 (1.085)                                                                | -.496 (.655)                                                                            |
| Implicit appeal × Racial prejudice | -.259 (.163)                                                                   | .011 (.186)                                                                             |
| Explicit appeal × Racial prejudice | -.083 (.168)                                                                   | -.190 (.191)                                                                            |
| Liberal × Racial prejudice | .155 (.164)                                                                    | -.134 (.232)                                                                            |
predicted in advance, robustness analyses presented in the Supplemental Material (S4) suggest this pattern largely—though not completely—holds in analyses varying model specifications and including demographic controls.

This interactive pattern between political ideology, experimental condition, and racial resentment is depicted graphically in Figure 1. After reading an antiwelfare message where racial cues were subtly implied, liberals high in racial resentment expressed less support for welfare programs than those who read an excerpt about global warming, while liberals low in racial resentment voiced approximately equivalent support across condition (Figure 1a). In contrast, moderates and conservatives high in racial resentment showed little effect of the implicit racial appeal condition on welfare support relative to the control condition (Figures 1b and 1c, respectively).

Turning to the effect of the explicit racial appeal, we find some evidence that explicit racial appeals also increase the effect of prior racial attitudes on liberals’ welfare support, but results here are not statistically significant. As shown in Figure 1, the nature of the interaction between liberalism, racial resentment, and the explicit racial appeal condition is similar to that of the implicit racial appeal condition. However, this effect is not significant ($p = .46$). That this result does not approach statistical significance, while the corresponding interaction for the implicit racial appeal condition is significant, is surprising given the apparently similar effects of these racial appeals among liberals high in racial resentment. Examining Figure 1 suggests that this difference is driven by the responses of moderates, the baseline category in our models. Whereas moderates high in racial resentment showed lower welfare support after reading the explicit appeal, moderates low in racial resentment showed lower welfare support after reading the implicit appeal. This suggests that the interaction between liberalism, racial resentment, and the implicit racial appeal condition is driven in part by an opposite of predicted effect among moderates, where implicit appeals decrease the effect of moderates’ racial attitudes on their welfare evaluations.

**Discussion**

In Study 1, we found that an implicit racial appeal subtly linking welfare usage to racial stereotypes of African Americans decreases participants’ welfare support. This decreased support for welfare is partially mediated by perceptions of welfare recipient deservingness. However, among participants as whole, we found no evidence that the implicit appeal increases the strength of participants’ racial prejudice on their evaluation of welfare programs, contrary to what racial priming theory would predict.

Instead, we found a three-way interaction between experimental condition, racial resentment, and political ideology suggesting that the dog-whistle effect was driven by liberal participants. Liberals high in racial resentment were less supportive of welfare after reading the implicit racial appeal compared to a message with no racial appeal. Results for explicit messages, however, were more ambiguous. We found no significant effects of the explicit racial messages relative to the control message among liberals, suggesting

| Table 2. (continued) |
|-----------------------|
| **Welfare Support Scale** |
| **Model 1: Welfare Support Predicted by Condition, Ideology, and Racial Resentment** | **Model 2: Welfare Support Predicted by Condition, Ideology, and Explicit Racial Prejudice** |
| Conservative × Racial prejudice | .041 | −.063 |
| Implicit appeal × Liberal × Racial prejudice | −.480* | −.284 |
| Implicit appeal × Conservative × Racial prejudice | −.138 | .420† |
| Explicit appeal × Liberal × Racial prejudice | −.169 | −.291 |
| Explicit appeal × Conservative × Racial prejudice | .424† | .298 |
| Intercept | 6.917*** | 4.592*** |
| N | 864 | 864 |
| $R^2$ | .490 | .379 |

Note: “Racial prejudice” is measured as “racial resentment” in Model 1 and as “explicit racial prejudice” in Model 2. Reference categories are the no racial appeal condition and moderate participants. Table entries are coefficients and standard errors.

* $p < .10$. † $p < .05$. *** $p < .001$.
these messages did not harness liberals’ prejudice to sway their policy views. However, we also found no significant differences between the effects of implicit and explicit messages. Therefore, we also did not find evidence that white liberals reject explicit racial appeals.  

Study 2: Dog-Whistling Gun Control

Why might we have found that implicit appeals harness racial prejudice specifically among white liberals? Previously, we hypothesized that this social group might be particularly likely of the implicit and explicit appeals in harnessing liberals’ racial prejudice. As shown in Tables S4B, S4D, S4F, S4H, and S4J, none of the interactions between the explicit appeal, racial prejudice, and liberalism are statistically significant at the $p < .05$ level, suggesting similar effects of implicit and explicit appeals.

See Supplemental Material (Tables S4B, S4D, S4F, S4H, and S4J) for models predicting participants’ welfare support by experimental condition, racial prejudice, and ideology. These models replicate the results we present in Table 2, except the implicit appeal is left as the baseline category, allowing for comparison between the effect
to exhibit the ambivalent racial attitudes assumed in racial priming theory, where whites harbor varying degrees of antiminority sentiment but also hold strong abstract commitments to norms of colorblindness and egalitarianism. However, some features of our results are not consistent with this hypothesis—in particular, that liberals did not appear to reject the explicit racial appeal—and other explanations are possible.

In particular, it is possible that the specific history of racialization of welfare can explain this finding in Study 1. Our previous study focused on a policy area—welfare—where the prevalence of racialized rhetoric urging opposition to welfare is well documented (e.g., H. E. Brown 2013; Gilens 1999; Hancock 2004; Quadango 1994). Therefore, continued exposure to racialized rhetoric around welfare policy may have led to strong chronic associations between whites’ racial attitudes and their views on welfare (Gilens 1996; Hurwitz and Peffley 2005), which might decrease the capacity for novel racial appeals to increase the already strong relationship between racial predispositions and welfare attitudes. If this chronic association is stronger among conservatives and moderates than among political liberals, which could be possible given the historical centrality of opposition to welfare in conservative rhetoric (e.g., Kuypers et al. 2003), this would explain why implicit appeals harnessed racial prejudice only among liberals in Study 1.

Thus, we designed our next study to focus on a policy area—gun control policy—where the extent of prior racial associations is lower in degree and different in nature. Though there exist important exceptions (see e.g., Winkler 2011), appeals for stricter firearm regulations historically have not linked these regulations to negative stereotypes of racial minorities. This may be in part because gun ownership has traditionally been strongly supported by less educated and rural whites, demographic groups that also report greater endorsement of negative minority stereotypes. In line with this observation, whites higher in racial resentment tend to be less supportive of gun control policies (Filindra and Kaplan 2016). This suggests that to the extent that this policy area is racialized, it is currently racialized in a way that leads whites’ racial prejudice to decrease their support for gun control.

Here, however, we examine the opposite possibility—that is, we test whether implicit or explicit racial appeals linking negative racial stereotypes of black criminality to the prevalence of guns lead whites higher in racial prejudice to increase support for gun control. Because any chronic associations that may exist between whites’ racial attitudes and their gun control attitudes appear to run in the opposite direction, we expect little prior racialization of this kind. Therefore, if liberals in Study 1 were the only group whose underlying racial predispositions were harnessed by implicit racial appeals because they have relatively weak prior associations between race and welfare policy, we would expect implicit racial appeals to increase the effects of racial attitudes among all groups in this study. Alternatively, if we find the same pattern of results we found in Study 1, then this would suggest that responses to implicit racial appeals in general are somehow conditioned by political ideology regardless of the level of prior racialization.

To increase the comparability of results across studies, we employed parallel designs and presented the same racial appeals, modified so that the same or similar language was invoked to urge support for gun control in Study 2 as was used to urge opposition to welfare in Study 1. In addition, we included a measure of participants’ political knowledge in the Study 2 pretest to examine the possibility that racial appeals only increase the impact of racial attitudes among whites low in political knowledge (Huber and Lapinski 2006).

Method

Participants were recruited via an advertisement posted on MTurk. One thousand seven hundred and seventeen participants completed a pretest, and 898 participants (418 men and 480 women) participated in the main study two weeks later. Participants who completed both waves of the study ranged in age from 19 to 88 years ($M = 40.8, SD = 12.7$), had a median household income between $40,000 and $49,999, and 48.6 percent had at least a college degree.

The method used in Study 2 was identical to that of Study 1 but for a few exceptions that we note in the following. First, to assess political knowledge, the pretest included five questions asking participants to answer questions about the structure of U.S. government or the identities of prominent American politicians (e.g., “Who is the current Speaker of the U.S. House of Representatives?”). The number of questions participants answered correctly was summed to form a scale ranging from 0 to 5.

Second, the excerpts that participants read in the implicit racial appeal and explicit racial appeal conditions were modified such that these messages now urged readers to support more stringent restrictions on gun ownership. For example, the implicit appeal urging opposition to welfare in Study 1 argued that “The irony is that misguided welfare programs actually helped turn a shrinking problem into a national tragedy.” For this study, we retained most of this language but changed “misguided welfare programs” to “gun access laws” and “compassion” to “liberty.” Therefore, while the focus of the message changed to gun control, the tone of the message remained largely unchanged, with the implicit appeal making oblique references to racial stereotypes and the explicit appeal directly referencing racial groups and racial stereotypes. Participants were then asked what they thought the speaker’s main argument was, assessing
whether the experimental manipulation was effective. The full text of the excerpts and details on manipulation checks are available in the Supplemental Material (S2B and S3B, respectively).

Next, participants’ support for gun control was measured with four questions adapted from the American National Election Studies and the General Social Survey asking them about the degree to which they would support increased restrictions on gun ownership (e.g., “There should be more legal restrictions on handguns in our society.”). These items were averaged to form a composite (Cronbach’s α = .89), ranging from 1 to 7.

Finally, following research on increasing reliability in online survey experiments (Berinsky, Margolis, and Sances 2013), we used a more rigorous approach than in our previous study to identify participants who were sufficiently attentive to the study. Rather than relying on time spent on the manipulations screen as we did in Study 1, here we included five screening questions interspersed throughout the study. Participants were coded as inattentive if they answered more than one of these questions incorrectly.

### Results and Discussion

Thirty-four participants were excluded from the analysis for either failing manipulation check or giving incorrect answers to more than one of the attention check questions, leaving a total of 864 participants for analysis. All models reported use OLS regression to predict participants’ attitudes.

We first tested the effect of the implicit and explicit racial appeals on participants’ support for gun control. Unlike in our first study, we found no significant differences in participants’ gun control attitudes across condition. Participants who read pro-gun control messages that implicitly or explicitly invoked racial stereotypes of black criminality overall did not differ statistically in their support for gun control from participants who read a message about global warming ($p$s = .72 and .83 for the implicit and explicit racial appeal conditions, respectively).

Next, we examined whether the racial appeals heightened the influence of baseline racial attitudes on participants’ support for gun control. Unlike in our first study, we found no significant differences in participants’ gun control attitudes across condition. Participants who read pro-gun control messages that implicitly or explicitly invoked racial stereotypes of black criminality overall did not differ statistically in their support for gun control from participants who read a message about global warming ($p$s = .72 and .83 for the implicit and explicit racial appeal conditions, respectively).

### Table 3. Ordinary Least Squares Regressions of Support for Gun Control: Effects of Experimental Condition and Racial Prejudice.

|                           | Model 1: Support for Gun Control Predicted by Condition and Racial Resentment | Model 2: Support for Gun Control Predicted by Condition and Explicit Racial Prejudice |
|---------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Implicit racial appeal    | .280 (0.359)                                                                     | −.141 (0.158)                                                                        |
| Explicit racial appeal    | −.049 (0.361)                                                                    | −.047 (0.154)                                                                        |
| Racial prejudice (racial resentment or explicit racial prejudice)     | −.543*** (0.062)                                                                | −.427*** (0.073)                                                                    |
| Implicit appeal × Racial prejudice                                  | −.068 (0.092)                                                                   | −.124 (0.115)                                                                        |
| Explicit appeal × Racial prejudice                                   | .039 (0.090)                                                                    | .013 (0.111)                                                                         |
| Intercept                 | 6.478*** (0.244)                                                                | 4.313*** (0.105)                                                                     |
| N                         | 864                                                                             | 864                                                                                  |
| $R^2$                     | .202                                                                            | .102                                                                                 |

Note: “Racial prejudice” is measured as “racial resentment” in Model 1 and as “explicit racial prejudice” in Model 2. Reference category is the no racial appeal condition. Table entries are coefficients and standard errors. 
***p < .001.

We also performed a more robust set of manipulation checks on these excerpts with a separate sample of participants (N = 180). These checks confirm that (1) the general content of the messages was understood, with more than 90% of participants correctly identifying the content of the message in all experimental conditions. In addition, (2) the implicit appeal was seen as more racialized than the control message ($p < .001$) but less racialized than the explicit appeal ($p < .001$). Finally, (3) the explicit appeal was seen as racially insensitive, while the implicit appeal and control messages were not ($p$s < .01). See Supplemental Material (S3B) for manipulation check items and results.
between racial attitudes and experimental condition reach conventional levels of statistical significance.

Next, we examined whether the racial appeals heightened the influence of baseline racial attitudes among either more liberal or more conservative participants. In two separate models, we interacted (1) racial resentment and (2) explicit racial prejudice with dummy variables for condition and dummy variables indicating whether the participant identified as liberal or conservative to predict participants’ support for gun control (Table 4).

Looking first at the effect of the implicit appeal, results suggest that implicit racial appeals increased the effect of prior racial attitudes on support for gun control among liberals. We found a positive three-way interaction between liberalism, racial resentment, and the implicit racial appeal condition ($p = .002$) such that liberals high in racial
resentment were more likely to voice support for increased restrictions on gun ownership after reading the implicit racial appeal compared to a message with no racial appeal. In addition, we found a similar positive, three-way interaction between liberalism, explicit racial prejudice, and the implicit racial appeal condition \((p = .006)\) such that liberals high in explicit racial prejudice were also more likely to voice support for gun control after reading the implicit racial appeal compared to a message with no racial appeal.

In addition, the models in Table 4 suggest that the implicit racial appeals may also have increased the effect of prior racial attitudes on support for gun control among conservatives. We found a positive three-way interaction between conservatism, racial resentment, and the implicit racial appeal condition \((p = .03)\) as well as a positive three-way interaction between conservatism, explicit racial prejudice, and the implicit racial appeal condition \((p = .03)\). However, examining the interactive pattern between political ideology, experimental condition, and racial attitudes shows that despite the similar direction of the coefficients, these effects among liberals and conservatives are different in kind.

The interactive patterns between political ideology, experimental condition, and racial resentment are shown graphically in Figure 2. After reading a pro-gun control message where racial cues were subtly implied, liberals high in racial resentment expressed increased support for heightened

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**Figure 2.** (a) Liberals’ gun control support, by experimental condition and racial resentment. (b) Moderates’ gun control support, by experimental condition and racial resentment. (c) Conservatives’ gun control support, by experimental condition and racial resentment.
firearm restrictions compared to those who read an excerpt about global warming, while liberals low in racial resentment voiced approximately equivalent support across conditions (Figure 2a). Moderates high in racial resentment, on the other hand, show sharply decreased support for gun control after reading the implicit racial appeal (Figure 2b), while conservatives show approximately equal support across conditions (Figure 2c). Thus, the significant interaction between conservatism, racial resentment, and the implicit racial appeal condition does not appear to represent a dog-whistle effect but rather a difference between conservatives showing no effect of condition and moderates showing an opposite of predicted effect. The interactive pattern between political ideology, experimental condition, and explicit racial prejudice is similar in character.

Turning to the effect of the explicit racial appeal, we also found evidence that explicit racial appeals increased the effect of racial resentment on support for gun control among liberals. As shown in Figure 2, the nature of the interactions between liberalism, racial resentment, and the explicit racial appeal condition is similar to that of the implicit racial appeal condition. Unlike in Study 1, this interaction is significant ($p = .03$).

Finally, we examined Huber and Lapinski’s (2006) claim that racial appeals heighten the influence of racial attitudes on policy evaluations only for whites who are not politically sophisticated enough to distinguish between implicit and explicit racial appeals. In separate models, we interacted (1) racial resentment and (2) explicit racial prejudice with the effect of condition and participants’ score on the political knowledge scale to predict participants’ support for gun control. We find little support for this claim. As shown in Table 5, neither the effects of political knowledge nor any of its interactions reach conventional levels of statistical significance ($p < .05$).

To summarize, in Study 2, we found that neither implicit nor explicit racial appeals heightened the influence of racial prejudice on gun control attitudes among participants on the

### Table 5. Ordinary Least Squares Regression of Support for Gun Control: Effects of Experimental Condition, Racial Prejudice, and Political Knowledge.

|                     | Model 1: Support for Gun Control Predicted by Condition, Political Knowledge, and Racial Resentment | Model 2: Support for Gun Control Predicted by Condition, Political Knowledge, and Explicit Racial Prejudice |
|---------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Implicit racial appeal | $2.149^{†}$                                                                                   | $.949^{*}$                                                                                                 |
| Explicit racial appeal | $-1.178$                                                                                      | $.244$                                                                                                     |
| Political knowledge  | $.286                                                                                          | $-0.40$                                                                                                   |
| Implicit appeal × Political knowledge | $-0.472$                                                                                      | $-0.283^{*}$                                                                                             |
| Explicit appeal × Political knowledge | $.333                                                                                         | $-0.086$                                                                                                 |
| Racial prejudice (racial resentment or explicit racial prejudice) | $-0.222$                                                                                      | $-0.132$                                                                                                 |
| Implicit appeal × Racial prejudice | $-0.332$                                                                                      | $.012$                                                                                                    |
| Explicit appeal × Racial prejudice | $.346                                                                                         | $.468$                                                                                                    |
| Political knowledge × Racial prejudice | $-0.081$                                                                                      | $-0.075$                                                                                                 |
| Implicit appeal × Political knowledge × Racial prejudice | $.067                                                                                         | $-0.042$                                                                                                 |
| Explicit appeal × Political knowledge × Racial prejudice | $-0.091$                                                                                      | $-0.135^{†}$                                                                                             |
| Intercept            | $5.329^{***}$                                                                                  | $4.450^{***}$                                                                                             |
| N                   | 864                                                                                           | 864                                                                                                       |
| $R^2$               | .228                                                                                          | .133                                                                                                       |

*Note:* “Racial prejudice” is measured as “racial resentment” in Model 1 and as “explicit racial prejudice” in Model 2. Reference category is the no racial appeal condition. Table entries are coefficients and standard errors. $^{†}p < .10$, $^{*}p < .05$, $^{***}p < .001$. 
whole, contrary to what racial priming theory would predict. Neither implicit nor explicit appeals had any effect on conservatives’ support for gun control. Among moderates, pro-gun control messages implicitly invoking racial stereotypes decreased support for gun control among those high in racial prejudice, the opposite effect of what the dog-whistle hypothesis would predict.

Instead, we found that implicit racial appeals heightened the influence of racial attitudes on support for gun control among liberals specifically. Whereas in Study 1 we found this effect for the racial resentment measure of racial prejudice, in Study 2 we found this effect for both racial resentment and explicit racial prejudice measures. In addition, we found that explicit racial appeals also heightened the influence of racial resentment on support for gun control among liberals. Although in our previous study we found some limited evidence that explicit appeals increase the strength of racial resentment on welfare evaluations among liberals, we found statistically reliable evidence of this effect for support for gun control.

**General Discussion**

We began our research motivated by two questions: (1) Do political messages that subtly cue racial stereotypes harness whites’ racial prejudice to sway their views on public policy? And, (2) Who is most responsive to implicit and explicit racial messages?

In our first experiment, we found that participants who read an implicit racial appeal linking welfare usage to racial stereotypes of African Americans reported greater opposition to welfare programs than participants who read a control message. In addition, we found that this effect was partially mediated by decreased perceptions of welfare recipient deservingness when racial stereotypes were subtly cued. Finally, we found a three-way interaction between experimental condition, racial resentment, and political ideology suggesting this decreased support for welfare was driven by liberal participants high in racial resentment.

A follow-up experiment tested the effects of messages supporting a political position—support for gun control—that is currently negatively correlated with endorsement of negative stereotypes of minorities. Again, we found a three-way interaction between experimental condition, racial resentment, and political ideology suggesting that the implicit racial appeal increased support for gun control among liberals high in racial resentment. In this second study, we also found that this effect occurred for liberals high in explicit racial prejudice. In addition, we found that liberals high in racial resentment showed significantly greater support for gun control after reading the explicit racial appeal.

Returning to the questions that motivated our research, our findings suggest that (1) political appeals that subtly invoke negative stereotypes of racial minorities can still influence whites’ policy views by harnessing their racial prejudice, though, as we discuss in the following, this response is conditioned by political ideology. Importantly, however, (2) appeals that explicitly reference racial stereotypes have similar though less consistent effects. Whereas in our first study we found that implicit appeals harness liberals’ racial resentment relative to a message presenting no racial appeal, in our second study we found that both explicit and implicit appeals harness prejudice among this group. Furthermore, in contrast with the vast literature on racial priming effects and in line with the smaller number of studies questioning the unique efficacy of implicit appeals (Huber and Lapinski 2006; Valentino et al. 2018), we found no statistically significant differences between implicit and explicit appeals’ effects in their ability to increase the impact of racial dispositions on whites’ policy views. This is surprising given the overtly racially hostile content of the explicit appeals, which was recognized as racially insensitive. This might indicate that changing norms around racial discourse have led these appeals to become more socially acceptable, as evidenced by the inflammatory racial rhetoric of Donald Trump’s 2016 successful presidential campaign (Valentino et al. 2018).

In addition, we find (3) that liberals high in racial resentment are particularly responsive to implicit racial appeals and sometimes explicit appeals as well. Although results differ across studies in other ways, in both studies we find that racial appeals harness racial resentment to shift whites’ views, but this effect occurs among liberals specifically. That we find similar effects for both opposition to welfare and support for gun control is notable because of the many ways that these two policy domains—and the racialized rhetoric surrounding them—differ. Whereas racially coded language and imagery has long been a feature of messages urging opposition to federal welfare spending, these images have been largely absent in messages urging support for increased gun control. In addition, racial appeals in support of gun control or in opposition to welfare have opposite political valence (liberal vs. conservative, respectively) and draw on different racial stereotypes (stereotypes of black criminality vs. stereotypes regarding work ethic and sexual morality, respectively).

Across these many differences, the pattern of results suggests that racial appeals increase the impact of racial resentment on policy views but that this effect is driven by liberals. Moderates and conservatives, on the other hand, had responses to racial appeals that varied across studies but that suggest these appeals either have little effect or can backfire for members of these groups. For example, in Study 2, we found an opposite of predicted effect among moderates, where pro-gun control messages implicitly invoking racial stereotypes decreased support for gun control among moderates high in

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9See Supplemental Material for full text of the messages (S2) and manipulation check items and results (S3).
racial prejudice. Although beyond the scope of the current research, we would welcome future research exploring what causes racial appeals to backfire.

These findings extend the dog-whistle hypothesis by demonstrating that ideology can condition whites’ responses to racial appeals. However, the current research has limitations that we hope future research will address. Here we used actual political rhetoric employed by conservative politicians or groups to increase the real-world relevance of our findings, but we acknowledge that we sacrificed some internal validity for external validity. Although we attempted to match the implicit and explicit appeals as closely as possible for length, racial themes employed, and content of the arguments, there are stylistic differences between the excerpts that are difficult to avoid in testing effects of naturally occurring racial appeals. For example, the invocation of racial conflict in the explicit appeal might be threatening to white participants, and this sense of racial threat could have downstream effects on their policy attitudes (Blumer 1958; Bobo 1999; Chow, Lowery, and Hogan 2013; Wets and Willer 2018). The fact that we find that implicit and explicit appeals largely show similar effects partially alleviates this concern, but we hope that future research will continue to probe the differential impact of implicit and explicit racial appeals while balancing concerns for internal and external validity.

**Liberals’ Responses to Racial Appeals**

Why might white liberals be most responsive to racial appeals in these studies? As noted previously, it is possible that dog-whistle messages were most effective in leading liberals high in racial resentment to oppose welfare in Study 1 because moderates and conservatives already have strong chronic associations between welfare usage and stereotypes of African Americans, leading these appeals to be ineffective for these participants. However, this explanation cannot account for why liberals were most responsive to a dog-whistle message in support of gun control, where racial appeals have largely been absent. It is also possible that we find this effect because racial resentment is a more valid measure of prejudice for liberals than it is for conservatives (Feldman and Huddy 2005). However, this explanation does not account for why we find that the implicit racial appeal increased the influence of explicit racial prejudice on liberals’ support for gun control in Study 2.

Although the current research cannot definitively answer this question, we offer two possible explanations of this pattern that we hope future research will pursue. First, it is possible that liberals are most responsive to dog-whistle messages because liberals as a group are likely to endorse norms of colorblindness and egalitarianism. Therefore, racially resentful liberals are particularly likely to demonstrate the ambivalent racial attitudes assumed in racial priming theory, where whites hold negative racial stereotypes but also are motivated to appear egalitarian. This explanation is consistent with previous research suggesting that implicit racial appeals are more effective than explicit appeals only among social groups that endorse norms of egalitarianism (Hutchings et al. 2010). Some aspects of our findings, however, are not consistent with this explanation. If this explanation were correct, we would expect that explicit racial appeals should have very different effects from implicit appeals among liberals because explicit appeals should be particularly likely to be rejected by liberals as racist. Instead, we found evidence that both explicit and implicit appeals can harness liberals’ racial attitudes.

Another possible explanation is that norms of colorblindness in liberal political culture impair the development of structural explanations of negative outcomes among black Americans, leaving liberals ill equipped to rebuff messages linking outcomes such as welfare utilization or criminal justice involvement to negative racial stereotypes. While liberal news sources are more likely than conservative news sources to frame responsibility for negative outcomes as resulting from social causes rather than personal problems or inadequacies (Kim, Carvalho, and Davis 2010), strong norms of colorblindness in liberal political culture mean negative outcomes among black Americans as a group are rarely discussed. Rather than tracing these outcomes to structural factors like concentrated poverty or lack of access to dominant institutions, discussion of these issues is often self-censored (Bonilla-Silva and Ashe 2014). Therefore, social and structural explanations of disproportionate incidence of negative outcomes like welfare usage and crime may not be readily accessible to liberals, leaving them vulnerable to rhetorical attempts to link their views about the proper political response to these issues to latent racial stereotypes.

Conservative politicians and news sources, on the other hand, regularly discuss the disproportionate incidence of welfare usage and crime among black Americans, often implicitly or explicitly tying these negative outcomes to moral or cultural failings of blacks (Haney-López 2014). Similar to our previous argument as to how the historical racialization of welfare might make racial appeals ineffective, these discussions in conservative media may lead moderates and conservatives to form strong chronic associations between welfare usage and stereotypes of African Americans that dampen the effect of any novel racial appeal. In the case of gun control, conservative news sources’ discussions of the disproportionate incidence of crime among black Americans may have a similar effect of leading to greater opinion rigidity among moderates and conservatives. These discussions in conservative media mean that conservatives and moderates have likely regularly encountered conservative elites’ arguments about how to respond to criminal activity among black Americans—and specifically, have encountered arguments that gun control policies will not solve the problem because these policies take guns out of the hands of “law-abiding,” implicitly white, citizens (Filindra and Kaplan 2016). We might therefore expect racial appeals to be ineffective for moderates and conservatives because their
exposure to elite cues about how to think about negative outcomes among black Americans leads them to be able to defend their previously held positions when presented with a novel racial appeal.

Although here we only speculate on why liberals might be more likely than other Americans to respond to this rhetoric, we hope that future research will further test our finding that implicit (and sometimes explicit) racial appeals increase the impact of racial prejudice on liberals’ policy views. This result was not predicted in advance of Study 1, and there are relatively few self-identified political liberals who fall above the median value of whites’ racial resentment, both in our data or in nationally representative surveys, leaving open the possibility that our results were driven by the responses of a small, idiosyncratic group. We have taken steps to ensure that this represents a reliable result, including (1) providing robustness checks in Supplemental Tables S4A–S4L and (2) replicating this result in Study 2 using a different political issue. However, this unpredicted result deserves further investigation, so we hope that future research will attempt to replicate our results.

In addition, it would be valuable for future research to examine more closely the sociodemographic characteristics and political attitudes of self-identified liberals high in racial resentment, whom our studies suggest are most swayed by racial appeals. Ideally, this work would be done with nationally representative samples. Although the MTurk samples we use in the current research are appropriate given our primary concern for causal inference (Coppock et al. 2018; Levay et al. 2016), they are not well suited for descriptive purposes like examining the characteristics of specific subpopulations. Therefore, future research should investigate the attitudes and responses of racially resentful liberals using nationally representative samples.

For now, we note that while white liberals high in racial resentment are a relatively small group, there is reason to suspect that they are also politically impactful. Based on analysis of 2016 American National Election Studies (ANES) data, this group constitutes about 3.1 percent of the population, or about 10 million people, large enough to be a consequential voting bloc. For comparison, this number is roughly equivalent to the number of Americans who identify as gay, lesbian, bisexual, or transgender (Gallup 2015). Furthermore, many political commentators have suggested that Donald Trump’s presidential victory in 2016 turned in part on traditionally Democratic white voters with whom Trump’s racial rhetoric resonated (e.g., Robert 2016). The current research lends credibility to this idea, suggesting that racially resentful liberals would be the group most responsive to the implicit—and sometimes explicit—racial appeals of Donald Trump’s presidential campaign (Manza and Crowley 2018).

In line with this observation, analyses of ANES data show that among whites, liberals high in racial resentment were particularly likely to switch from voting for Barack Obama in 2012 to voting for Donald Trump in 2016. We perform a logistic regression predicting whether a white respondent switched their vote to Trump by control variables, respondent’s ideology, racial resentment, and the interaction between ideology and racial resentment (see Supplemental Material, S1, for methods used in analysis of ANES data). We find a significant interaction between ideology and racial resentment \( (p < .001) \) such that white, racially resentful liberals were particularly likely to switch their vote to Trump. Figure 3 displays the predicted probability of a white American switching his vote from Obama in 2012 to Trump in 2016, by ideology and racial resentment.

Note: Predicted probabilities generated based on logistic regression model presented in Table S1B in the Supplemental Material, with control variables held at their medians. See Supplemental Material (S1) for details on methods used in analysis of American National Election Studies (ANES) data.

### Figure 3
Predicted probability of white American switching vote from Obama in 2012 to Trump in 2016, by ideology and racial resentment.

10 About 20 percent of white liberals in each of our samples and in the 2016 survey wave of the American National Election Studies fall into this group (or approximately 6 percent of all participants in our all-white samples and about 3 percent of the general American population). For further details on the distribution of racial resentment among these samples, see Supplemental Material (S5).

11 For example, because ideological self-identification does not have a universal meaning across social contexts (e.g., Feinberg et al. 2017), it is possible that these racially resentful liberals would not be considered liberal by the standards of most sociologists or other self-identified liberals. If such racially resentful liberals are largely conservative in their policy positions, our characterization of these participants as liberals could be potentially misleading. We do not have sufficient data to fully address this concern because we lack data on participants’ nonracial policy attitudes. However, our data on these participants’ partisan affiliations suggest they are more similar to other liberals than they are to conservatives or moderates. For example, in Study 1, about 62 percent of racially resentful liberals identify as Democrats, which is comparable to about 66 percent among liberals as a whole. Only about 4 percent identify as Republicans. See Table S5B for descriptive statistics comparing these participants to liberal, moderate, and conservative participants on sociodemographic variables and partisan identification.
or her vote by ideology and racial resentment with other demographic and socioeconomic variables held at their medians. Among those liberals highest in racial resentment, the predicted probability of switching to Trump rises above 50 percent.

Although the current research cannot speak directly to whether these individuals voted for Donald Trump because his campaign messages invoked negative stereotypes of racial minorities (Manza and Crowley 2018), this finding provides suggestive evidence that the dynamics we see in our experiments may have consequential effects in American politics.

Conclusion

Our findings suggest that implicit racial appeals can sway whites’ views by linking their policy evaluations to their racial prejudice and that these effects are driven by political liberals. In addition, our findings suggest that explicit racial appeals have similar though less consistent effects. This research adds support to the mounting evidence that white Americans no longer consistently reject explicit racial appeals, while highlighting the need for a better understanding of why liberals appear to be the group most called by the dog whistle.

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Supplemental Material

Supplemental material for this article is available online.

References

Aistrup, Joseph A. 1996. *Southern Strategy Revisited: Southern Republican Top-Down Advancement*. Lexington, KY: University Press of Kentucky.

Berinsky, Adam J., Michele F. Margolis, and Michael W. Sances. 2013. “Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys.” *American Journal of Political Science* 58(3):739–53.

Blumer, Herbert. 1958. “Race Prejudice as a Sense of Group Position.” *Pacific Sociological Review* 1(1):3–7.

Bobo, Lawrence. 1999. “Prejudice as Group Position: Microfoundations of a Sociological Approach to Racism and Race Relations.” *Journal of Social Issues* 55(3):445–72.

Bobo, Lawrence, James Kluegel, and Ryan Smith. 1997. “Laissez-faire Racism: The Crystallization of a Kinder, Gentler, Antiblack Ideology.” Pp. 15–42 in *Racial Attitudes in the 1990s: Continuity and Change*, edited by S. Tuch and J. Martin. Westport, CT: Praeger.

Bonilla-Silva, Eduardo, and Austin Ashe. 2014. “The End of Racism? Colorblind Racism and Popular Media.” Pp. 57–83 in *The Colorblind Screen: Television in Post-racial America*, edited by S. Turner and S. Nilsen. New York: NYU Press.

Brown, Hana E. 2013. “Race, Legality, and the Social Policy Consequences of Anti-immigration Mobilization.” *American Sociological Review* 78(2):290–314.

Brown, Jessica. 2016. “The New Southern Strategy: Immigration, Race, and ‘Welfare Dependency’ in Contemporary US Republican Political Discourse.” *Geopolitics, History and International Relations* 8(2):22–41.

Buhrmester, Michael, Tracy Kwang, and Samuel Gosling. 2011. “Amazon’s Mechanical Turk a New Source of Inexpensive, Yet High-Quality, Data?” *Perspectives on Psychological Science* 6(1):3–5.

Chow, Rosalind, Brian Lowery, and Caitlin Hogan. 2013. “Appeasement: Whites’ Strategic Support for Affirmative Action.” *Personality and Social Psychology Bulletin* 39(3):332–45.

Coppock, Alexander, Thomas Leeper, and Kevin Mullinix. 2018. “Generalizability of Heterogeneous Treatment Effect Estimates across Samples.” *Proceedings of the National Academy of Sciences* 115(49):12441–46.

Dixon, Travis L., and Daniel Linz. 2000. “Overrepresentation and Underrepresentation of African Americans and Latinos as Lawbreakers on Television News.” *Journal of Communication* 50(2):131–54.

Domke, David. 2001. “Racial Cues and Political Ideology: An Examination of Associative Priming.” *Communication Research* 28(6):772–801.

Edsall, Thomas Byrne, and Mary D. Edsall. 1992. *Chain Reaction: The Impact of Race, Rights, and Taxes on American Politics*. New York: W.W. Norton & Company.

Feinberg, Matthew, Alexa M. Tullett, Zachary Mensch, William Hart, and Sara Gottlieb. 2017. “The Political Reference Point: How Geography Shapes Political Identity.” *PLOS One* 12(2):e0171497.

Feldman, Stanley, and Leonie Huddy. 2005. “Racial Resentment and White Opposition to Race-Conscious Programs: Principles or Prejudice?” *American Journal of Political Science* 49(1):168–83.

Filindra, Alexandra, and Noah J. Kaplan. 2016. “Racial Resentment and Whites’ Gun Policy Preferences in Contemporary America.” *Political Behavior* 38(2):255–75.

Fox, Cybelle. 2004. “The Changing Color of Welfare? How Whites’ Attitudes toward Latinos Influence Support for Welfare.” *American Journal of Sociology* 110(3):580–625.

Gallup. 2015. “Americans Greatly Overestimate Percent Gay, Lesbian in U.S.” https://news.gallup.com/poll/183383/ameri cans-greatly-overestimate-percent-gay-lesbian.aspx

Gilens, Martin. 1995. “Racial Attitudes and Opposition to Welfare.” *Journal of Politics* 57(4):994–1014.

Gilens, Martin. 1996. “‘Race Coding’ and White Opposition to Welfare.” *American Political Science Review* 90(3):593–604.

Gilens, Martin. 1999. *Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy*. Chicago: University of Chicago Press.

Gilliam Jr., Franklin, and Shanto Iyengar. 2000. “Prime Suspects: The Influence of Local Television News on the
Weinberg, Jill, Jeremy Freese, and David McElhattan. 2014. “Comparing Data Characteristics and Results of an Online Factorial Survey between a Population-Based and Crowdsourced Recruited Sample.” *Sociological Science* 1:292–310.

Wetts, Rachel, and Robb Willer. 2018. “Privilege on the Precipice: Perceived Racial Status Threats Lead White Americans to Oppose Welfare Programs.” *Social Forces* 97(2):793–822.

White, Ismail K. 2007. “When Race Matters and When It Doesn’t: Racial Group Differences in Response to Racial Cues.” *American Political Science Review* 101(2):339–54.

Wilson, George, and Amie L. Nielsen. 2011. “‘Color Coding’ and Support for Social Policy Spending: Assessing the Parameters among Whites.” *The Annals of the American Academy of Political and Social Science* 634(1):174–89.

Winkler, Adam. 2011. *Gunfight: The Battle over the Right to Bear Arms in America*. New York: W.W. Norton & Company.

Winter, Nicholas J. G. 2008. *Dangerous Frames: How Ideas about Race and Gender Shape Public Opinion*. Chicago: University of Chicago Press.

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