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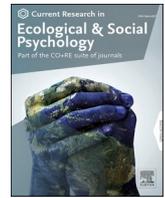
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## Trickle-down racism: Trump's effect on whites' racist dehumanizing attitudes

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## ABSTRACT

Reported hate crimes against Black people surged following Trump's election. While only a relatively small fraction of Americans committed these abhorrent actions, we show that Trump's victory had broader effects on the attitudes of the larger white public. Specifically, Trump altered the extent to which white survey respondents describe Black people in dehumanizing ways. We report findings from a two-wave national survey in which white respondents rated Black people on a dehumanizing attitudes scale before and after the 2016 presidential election. Trump supporters rated Black people as less "evolved" in the post-election wave than they rated Black people in the pre-election wave. Conversely, Trump opponents rated Black people as more "evolved" in the post-election wave than in the pre-election wave. These findings suggest Trump's victory had a polarizing effect on whites' expression of dehumanizing views of Black people, with important implications for scholars' understanding of the sociopolitical factors that can affect dehumanizing attitudes and the normalization of racism in the U.S. today.

One of the defining features of Trump's 2016 presidential candidacy was his willingness to defy social norms with his use of explicitly racist rhetoric and his association with white supremacists (Mendelberg, 2001; Stephens-Dougan, 2021; Valentino et al., 2018). For example, during his campaign, Trump described Mexican immigrants as "rapists," was slow to renounce the endorsement of former KKK leader David Duke, and described the white supremacists protesting the removal of a Confederate statue in Virginia as "very fine people." Long before his 2016 presidential bid, Trump was notorious for his racist rhetoric (Burns, 2015), and his prominence on the national political scene prior to the 2016 election was tied to his support of the "birther movement" - a racist conspiracy theory casting doubt on President Obama's birthplace and the legitimacy of his election (Jardina and Traugott, 2019).

In an interview with CNN during the 2016 presidential campaign, Mitt Romney worried that Trump's presidency would deliver "trickle-down racism" (Schleifer, 2016). Romney's remarks implied that Trump's rhetoric would legitimize racism among American citizens. This concern seemed to be validated by the fact that in the wake of Trump's campaign and election, there was an increase in reported hate crimes across the country (Edwards and Rushin, 2018). FBI data show

that the spike in hate crimes following Trump's victory was the second-largest increase in the 25 years data were collected—second only to the spike that occurred after the 9/11 terrorist attacks (Williamson and Gelfand, 2019). The surge in hate crimes was largest in counties where Trump held a campaign rally (Feinberg et al., 2019). While these events offer suggestive evidence that Trump emboldened at least some racially prejudiced individuals, they do not provide much insight into whether Trump may have more broadly transformed the racial attitudes of white Americans. They also do not tell us much about whether some whites may have rebuffed Trump's racism by becoming less prejudiced in their views. Here, we build on research that investigates these claims (e.g., Schaffner 2020) by focusing specifically on the extent to which Trump may have influenced the degree to which some whites endorse or reject *dehumanizing* portrayals of Black people.<sup>1</sup>

A growing body of research in the social sciences has begun to investigate dehumanizing attitudes as a common, everyday phenomenon (Kteily and Landry, 2022; Wilde et al., 2014). While scholars have begun to develop rich theoretical accounts of the myriad ways in which we dehumanize others (see Kteily and Landry, 2022 for a summary), we focus in particular on dehumanizing beliefs that deny the full humanity

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E-mail address: [ajardina@virginia.edu](mailto:ajardina@virginia.edu) (A. Jardina).<sup>1</sup> Following political theorist Joel Olson (2004), we capitalize "Black" because it is both a cultural and a political category, whereas "white" is solely a political category.<https://doi.org/10.1016/j.cresp.2023.100158>

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of a target group by likening them to animals or other non-humans (Haslam and Loughnan, 2014; Kteily et al., 2015). In prior work, we argue that historical political and social forces have made Black people the target of this form of dehumanization, shaping the content of racial attitudes today (Jardina and Piston, 2021, 2023). Further, while some past work has focused on implicit dehumanizing attitudes—those held outside of conscious awareness or control (e.g., Goff et al., 2008)—a number of studies have demonstrated that many white Americans are willing to endorse explicit and overt dehumanizing characterizations of a number of target groups, including Black Americans (Bruneau et al., 2017, 2018; Jardina and Piston, 2019, 2021; Kteily et al., 2015). Past work has found, for instance, that more than 40 percent of white Americans rate Black people as “less evolved” and more “ape-like” than they rate white people (Jardina and Piston, 2022). These dehumanizing attitudes are politically consequential, influencing, for example, support for punitive and racially discriminatory criminal justice policies (Jardina and Piston, 2016).

While many scholars are rightly concerned with the prevalence and consequences of dehumanizing attitudes, fewer have been concerned with the institutional contexts that give rise to racially-dehumanizing attitudes and the expression of these attitudes. As Maynard & Luft (this issue, p. 5) write, “dehumanization likely varies according to how deeply institutionalized it is. Being exposed to dehumanizing words, cues, or primes in propaganda is one thing. But what if dehumanization is written into organizational norms and standard operating procedures? What if speeches that dehumanize people are made by reputable political or military leaders?”

The aim of our investigation here is to determine whether the distribution of dehumanizing attitudes toward Black people changed during Trump’s racially-vitriolic presidential campaign. We focus in particular on the potential effects of Trump’s campaign for a number of reasons. First, Trump was unique in the degree to which he, as a modern presidential candidate, violated norms of racial equality with his explicitly racist rhetoric (Valentino et al., 2018). Indeed, several scholars have demonstrated that Trump was uniquely skilled at exploiting whites’ racial attitudes (Bobo, 2017; Jardina, 2019b; King and Smith, 2020; Sides et al., 2018). Second, past work has shown that explicitly dehumanizing attitudes were associated with strong support for Trump in the 2016 election (Jardina et al., 2016; Jardina and Piston, 2022). One reason for this association may be because Trump helped foster dehumanizing attitudes among his supporters over the course of his campaign.

Using a two-wave panel study of 600 non-Hispanic white respondents interviewed just before and after the 2016 presidential election, we find that Trump support was associated with an increase in whites’ endorsement of dehumanizing portrayals of Black people after Trump’s electoral victory. We also find suggestive evidence of a backlash effect: Trump’s opponents became less likely to express dehumanizing views toward Black people after the election.

Because we lack experimental control over who holds the office of the presidency, our confidence in the causal inferences that can be drawn from our analysis of panel data is limited. However, we address threats to causal inference through two key placebo tests. We find, first of all, that the endorsement of portrayals of *white* people did *not* change over time; the change was limited, as we expected, in reported attitudes toward Black people. Second, support for another political candidate, Hillary Clinton, was *not* associated with change in the expression of dehumanizing attitudes toward Black people. In sum, therefore, the changes we observed were not attributable to general changes in the evaluations of racial groups, nor were they moderated by support for just any political candidate. Instead, the results are consistent with our argument that Trump’s candidacy changed the expression of dehumanizing attitudes toward Black people.

These findings indicate that racial attitudes are not as resistant to change as previous work has claimed. Our findings also have important implications for research on racially-dehumanizing attitudes and the

expression of these attitudes, suggesting that as with prejudice, this form of racism is also subject to elite influence. Previous work has shown that political candidates may attempt to exploit racial attitudes for political gain (e.g., Stephens-Dougan, 2020; 2021). Building on this work, our findings suggest that political elites can capitalize on racial attitudes not only by making them more relevant to political decisions, but also by actually influencing reported levels of these attitudes.

### Changing racial attitudes in the trump ERA

Past research has often characterized racial attitudes as stable dispositions that are resistant to elite influence (Jennings et al., 2009; Kinder and Sanders, 1996; Sears and Brown, 2013; Tesler, 2015). Most prior work has therefore focused not on the degree to which political elites can change citizens’ racial attitudes, but instead on whether such rhetoric primes attitudes, making them more relevant to political preferences such as vote choice (Hutchings and Jardina, 2009; Mendelberg, 2001; Schaffner et al., 2018; Stephens-Dougan, 2020; Valentino et al., 2002). A recent and growing body of work, however, has questioned the stability of racial attitudes. Some of this research has found that in recent years, in the midst of significant partisan polarization, whites changed their racial attitudes to align with their partisan identities (Engelhardt, 2020, 2023). Other work has found that exposure to political candidates can transform racial attitudes. Goldman (2012), for instance, argues that because images of Barack Obama contradicted negative racial stereotypes, exposure to Obama reduced racial prejudice among whites.

Several studies have focused specifically on Trump’s influence on white racial attitudes toward Black people – or at least the expression of these attitudes. Hopkins and Washington (2020), for example, find that among a nationally-representative sample of white Americans, subscription to anti-Black and anti-Hispanic stereotypes actually declined immediately after Trump’s election in 2016. Other work, however, has found that Trump had a polarizing effect on racial attitudes; his supporters expressed more prejudiced views after the election while his opponents demonstrated less prejudiced attitudes (Crandall et al., 2018; Ruisch and Ferguson, 2023). Several studies have experimentally linked Trump’s rise in popularity with a greater propensity to express prejudiced statements or xenophobic views (Burszty et al., 2020; Schaffner and Hall, 2018), especially among the most racially prejudiced (Newman et al., 2021). Trump also seems to have led his initial supporters to express more anti-Black and anti-immigrant views over the course of his presidential campaign (Enns and Jardina, 2021).

Most of this work has concentrated on Trump’s effect on either anti-Black stereotypes or on modern, subtle forms of racial prejudice like racial resentment. In our view, however, many contemporary portrayals of Black people in the United States differ in important ways from anti-Black racism as it is typically understood by many social scientists. Some scholars define prejudice as stereotypes, or negative generalizations about black people as lazy, unintelligent, untrustworthy, or violent (Sniderman and Carmines, 1997). Other scholars focus on symbolic racism or racial resentment, defined as negative affect toward black people fused with the judgment that black people do not sufficiently adhere to Protestant values like hard work and individualism (Kinder and Sanders, 1996; Tesler and Sears, 2010). Much of the language associated with Trump and his supporters, however, does not fit into either of these two paradigms. For example, Trump supporters have been documented referring to Black people, including Barack Obama, as monkeys,<sup>2</sup> and Trump’s son, Eric, referred to Black Lives Matter

<sup>2</sup> <https://www.washingtonpost.com/news/post-nation/wp/2018/06/01/how-it-feels-to-be-called-a-monkey/>; <https://www.washingtonpost.com/news/post-politics/wp/2016/07/05/trump-accuses-hillary-clinton-of-offering-bribe-to-attorney-general-lynch/>

protestors as animals (Jardina and Piston, 2022).<sup>3</sup> What distinguishes these examples is that they are dehumanizing - that is, they liken Black people to animals and deny their full humanity. Dehumanizing attitudes may share some of the same social cognitive bases as racial prejudice, such as psychological essentialism: the belief that group members all share an underlying essence (Leyens et al., 2000; Smith, 2020). Unlike prejudice, however, dehumanizing attitudes are unique in that they distinctly involve the denial of human essence, as opposed to other traits.

While a growing number of studies have provided substantial evidence that many white Americans hold dehumanizing attitudes, to our knowledge, no study to date has examined whether whites' endorsement of dehumanizing portrayals of Black Americans may be affected by political elites. Given the growing evidence noted above regarding the effect of Trump's campaign and election on whites' willingness to express racial stereotypes and resentment, we suspect that Trump may also have influenced whites' willingness to express dehumanizing racial attitudes. In what follows, we test this proposition.

### Trump effects

Here we discuss three reasons why Trump's campaign may have shaped whites' propensity to express dehumanizing attitudes toward Black people. For one, views about race, like other political attitudes, may change in response to cues in the political environment, including elite messages (Enns and Jardina, 2021; Lenz, 2012; Zaller, 1992). In other words, dehumanizing attitudes may be subject to learning effects, whereby whites learn the attitudes of their favored political candidate and update their own beliefs accordingly.

A second possibility is that Trump's rhetoric signaled to many whites a shift in norms about whether expressions of racism are socially acceptable (Crandall et al., 2018). The expression of prejudice tends to be highly correlated with social norms (Blanchard et al., 1994; Crandall et al., 2002), and social desirability pressures can influence how whites respond to survey questions on race even when they know their responses are anonymous (Krupnikov et al., 2016). In response to Trump's racist messaging and behavior, coupled with the legitimacy his election may have bestowed on this behavior, many whites may have come to believe that it was more acceptable to possess and share greater levels of racial animus (Newman et al., 2020; Schaffner et al., 2018). As a result, these whites may have felt more comfortable expressing on surveys their pre-existing dehumanizing beliefs.

We also account for the possibility that Trump's racist signals may have polarized reported dehumanizing attitudes by eliciting a backlash effect among some whites. Such an effect would be consistent with several studies that have shown that white Democrats have become especially liberal in their expressed racial attitudes over the past decade (Tesler 2016), and particularly after Trump's election (Engelhardt, 2020; Jardina and Ollerenshaw, 2022). Rather than expressing more dehumanizing views in response to Trump, some whites, particularly those that opposed Trump, may have rejected such views. The potential explanations for such a shift are likely similar to those we just described; either these whites updated their views to distance themselves from Trump or to comport with those of their preferred candidate (Trump's opponent, Hillary Clinton), or they may have experienced social-norm pressures to report more racially-egalitarian views. Indeed, while Trump's racist rhetoric and behavior may have sent signals encouraging the expression of prejudicial views among some whites, extensive media coverage and political commentary identifying and rejecting Trump's racism may have sent a very different signal to others about what was socially acceptable. Our approach limits our ability to distinguish between these two explanations - learning or changes in social norm

pressures - but it does allow us to assess whether survey responses to dehumanizing attitudes markedly changed before and after Trump's election.

### Overview of study

The fundamental problem of causal inference is that we cannot observe what does not happen. In this case, we cannot observe a universe, otherwise identical to the one in which we live, where Trump did not win the election. It is therefore difficult to analyze the effects of his victory. Experiments attempt to circumvent the problem of unobservable counterfactuals through random assignment, but of course a field experiment randomly assigning individuals to a "treatment condition" consisting of an alternative presidency is impossible. However, we can approximate this counterfactual. By analyzing panel data in which the exact same individuals are asked their opinions about Black people at two different time points, we can see whether their survey responses changed after the election.

Because our strategy leverages both between-subject and within-subject variation, it yields greater statistical power than would be available with only cross-sectional data. Our approach also has a key benefit relative to lab-experimental designs. Rather than examining change that has been artificially induced by the experimenter and then attempting to generalize beyond the lab, we seek to measure attitude change that was actually induced in the real world by Trump's electoral victory. The use of panel data, therefore, allows us to avoid the substantial disadvantages that would come with either a cross-sectional survey or a laboratory experiment.

However, threats to causal inference remain. In our case, the central difficulty is that it is impossible to completely isolate the effect of Trump's election, for the simple reason that many other things changed between October and November of 2016, with potential consequences for whites' propensity to express dehumanizing attitudes. Because we lack experimental control over who holds the office of the presidency, we deal with this concern in a few ways.

First, if increases in dehumanizing attitude reports are truly attributable to Trump's victory, they should be found among his supporters rather than his opponents. It was his supporters, after all, not his opponents, who felt emboldened to express racist sentiments in a range of horrific, high-profile events immediately following the election. We therefore examine whether attitude change over time covaries with warmth toward Trump. In turn, however, warmth toward Trump may be a function of other variables, particularly partisanship, education, age, and gender (Schaffner et al., 2018), that might also condition racial attitude change over time, making it difficult to assess Trump's unique impact. Additionally, therefore, we control for these factors using multivariate regression analysis. Finally, as discussed further below, we also conduct placebo tests to determine if any patterns we observe uniquely pertain to evolutionary ratings of Black people (rather than of white people) and are uniquely associated with warmth toward Trump (rather than Clinton).<sup>4</sup>

### Method

#### Participants

Six hundred non-Hispanic white adult U.S. citizens participated in this study, which was fielded by the survey firm YouGov in 2016. 322 (54 %) were female. The mean age of participants was 48, and the median respondent had completed some college education but had not obtained a Bachelor's degree. The survey took place in two waves. The first wave was conducted between October 10 and October 12, 2016 (N

<sup>3</sup> <https://www.newsweek.com/eric-trump-calls-black-lives-matter-protesters-animals-rally-tulsa-1512374>

<sup>4</sup> The data and materials for this study, which was not preregistered, can be found here: <https://osf.io/mza5f/>.

= 1467), and the second was conducted between November 14 and November 15, 2016 ( $N = 693$ ). From there the sample was matched down to 600 participants for the final dataset. The attrition rate is not associated with any of the variables used in this study except for age ( $p < 0.05$ ); the mean age of participants in wave 1, 46, was two years younger than the age of participants in the final dataset. Our sensitivity analysis using the *G\*Power* software (Faul et al. 2007) found that to detect a two-point change in the evolutionary ratings of Black people with a power of 0.8, a sample size of 311 is required.

**Materials**

Dehumanizing attitudes are measured using what has become a standard question in the social sciences. Respondents are asked to rate ‘how evolved’ they believe Black people are on a 0 to 100 scale accompanying an image of the iconic ‘ascent of man’ depicting a popular (and incorrect) perception of the evolution of humans (Kteily et al., 2015). The image features five silhouettes arranged on a scale beginning with an ape-like figure and ending with a modern human. A version of this same question, but asking about whites, is used in a placebo test as described below.

Warmth toward Trump is measured through a 0–100 point feeling thermometer. Here too another version of the question, this time asking about Clinton, is used in a placebo test as described below.

Control variables include party identification (a branching two-item question), education (single-item), age (single-item), and gender (single-item). Question wording for all variables used in this study can be found in Appendix 1.

Additional measures (not analyzed in the research reported in this manuscript) include questions about opinions about criminal justice policy and police conduct (wave 1), racial attitudes (wave 1), attitudes about environmental policy (wave 1), and a separate experiment about hypothetical candidates for office (wave 2).<sup>5</sup>

In the regression analyses that follow, we recode the measures of all independent variables so that they range from zero to one to facilitate the interpretation of regression coefficients; we do not, however, follow this practice in figures, since they do not plot regression coefficients. All analyses handle missing responses using listwise deletion. Finally, we employ survey weights provided by YouGov, intended to achieve national representativeness, unless otherwise indicated.

**Procedure**

Prior to the study, participants had filled out questions about demographics and political orientations as part of YouGov’s respondent profile. These questions included party identification, education, age, and gender. In wave 1, respondents answered the questions about warmth toward Trump and Clinton; they also answered the Ascent of Man question for both “blacks” and “whites.”

Respondents answered the Ascent of Man question once again in wave 2.

**Analysis and results**

To assess the effect of Trump’s election on whites’ endorsement of dehumanizing depictions of Black people, we begin by comparing respondents’ average ratings of Black people on the ascent of man scale across the two survey waves. We find that, on balance, dehumanizing attitudes are equivalent before and after the election. Prior to the

<sup>5</sup> This experiment was implemented near the end of the survey as part of a separate project. Some of the survey items analyzed in the study discussed in this article were asked on the survey after this experiment, but we find that none of the experimental conditions had any effect on responses to the items of interest in this study.

election, our respondents’ mean rating of Black people was 82.6 on the 0–100 evolutionary scale; after the election, the mean rating was 82.3. The difference between these two is substantively small, 0.3 points, and not statistically distinguishable from 0 (paired *t*-test:  $p < 0.79$ ; see Appendix 2 for the distribution of the evolutionary ratings of Black people in each wave).

However, it is possible that this null finding masks countervailing effects. We suspect that Trump supporters increasingly rated Black people in dehumanizing ways after the election, while white Trump opponents became less likely to express dehumanizing views about Black people. To assess this possibility, we conduct an ordinary least squares regression in which the dependent variable is post-election (wave 2) evolutionary ratings of Black people, the independent variable of interest is warmth toward Trump (wave 1; see Appendix 3a for the distribution of this variable), and the key control variable is pre-election (wave 1) evolutionary ratings of Black people.

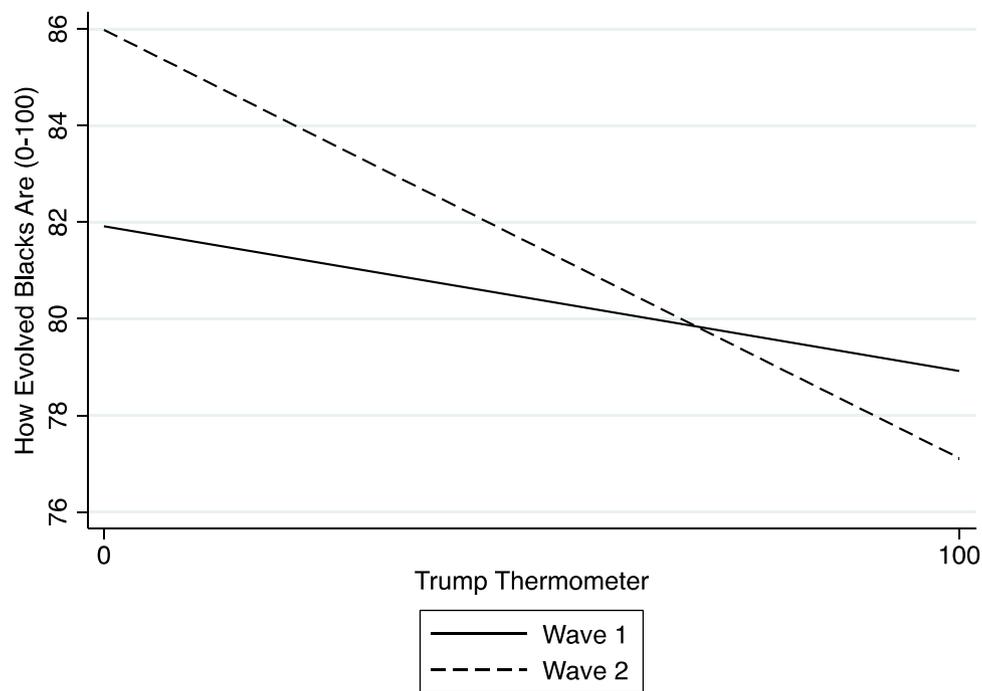
The guiding intuition behind this approach (Finkel, 1995) is that post-election evolutionary ratings of Black people may differ from pre-election evolutionary ratings of Black people because of something that had not yet happened when wave 1 of the survey was administered: Trump’s electoral victory. Furthermore, the effects of Trump’s victory on self-reported dehumanizing attitudes, we suspect, varied systematically; that is, they were moderated by warmth toward Trump. In sum, this approach allows us to see whether variation in warmth toward Trump explains variation in post-election dehumanizing attitudes that is not explained by variation in pre-election dehumanizing attitudes. Finally, we include additional control variables plausibly related to both Trump approval and post-election evolutionary ratings of Black people (Schaffner et al., 2018): partisanship, education, age, and gender (wave 1). We report coefficient estimates from our model in Table 1.

As the table shows, warmth toward Trump (wave 1) is negatively associated with ratings of how evolved Black people are (wave 2), net of other factors. In other words, those viewing Trump favorably prior to the election, on average, rated Black people as less evolved post-election than they had rated Black people pre-election. This relationship is statistically significant and substantively meaningful. Consider, for example, movement from the coldest possible evaluation of Trump (9 % of participants expressed this response) to the warmest possible evaluation of Trump (6 % of participants expressed this response). Such movement is associated with an estimated decrease over time in evolutionary ratings of Black people of 7.34 points on the 100-point scale.

**Table 1**  
Pre-election warmth toward Trump predicts post-election dehumanizing attitudes.

	Evolutionary ratings of Black people (wave 2)
Warmth toward Trump (wave 1)	-7.34* (3.26)
Evolutionary ratings of Black people (wave 1)	0.51*** (0.06)
Party identification (Republican)	3.93 (3.46)
Education	2.92 (3.81)
Age	3.70 (4.09)
Gender (male)	-0.32 (1.91)
Constant	39.44*** (5.06)
N	546
R-squared	0.36

Source: 2016 YouGov Study. Cell entries are ordinary least squares regression coefficients. Data are weighted.



**Fig. 1. Warmth toward Trump and evolutionary ratings of Black people pre- and post-election.** Source: 2016 YouGov Study. Data are weighted. The figure displays predicted values of evolutionary ratings of Blacks (y-axis) by warmth toward Trump (x-axis), across the pre-election wave (wave 1) and the post-election wave (wave 2), based on ordinary least squares regression models reported in Appendix 4.

Also of note is the null association between partisanship and evolutionary ratings of Black people in wave 2. Holding constant warmth toward Trump and the other factors in our model, Republicans, on average, rated Black people as no less (and no more) evolved post-election than they had rated Black people pre-election. In other words, it appears that evaluations of Trump in particular, not partisanship in general, conditioned change in evolutionary ratings of Black people from before to after the election.

The results presented in Table 1 reveal an association between support for Trump and changes in the expression of dehumanizing attitudes toward Black people over time. However, the findings so far do not allow us to observe whether this association is driven by those who view Trump favorably (rating Black people as less evolved over time) or by those who view Trump unfavorably (rating Black people as more evolved over time), or both. We therefore supplement the above analysis by breaking out the analysis across two separate waves. That is, we plot, in Fig. 1, two regression lines: (1) the association between warmth toward Trump in wave 1 of the study and evolutionary ratings of Black people in wave 1; and (2) the association between warmth toward Trump in wave 1 of the study and evolutionary ratings of Black people in wave 2. Other than these changes, the specification remains the same as that in Table 1; the figure is based on ordinary least squares regression models that include partisanship, education, age, and gender as control variables. Coefficient estimates can be found in Appendix 4.

The figure reveals a polarizing effect. Those whites with favorable feelings toward Trump report lower evolutionary ratings of Black people over time, while those with unfavorable feelings toward Trump report higher evolutionary ratings of Black people over time. At the extreme low end of the Trump thermometer, in which respondents report the coldest possible feelings toward Trump, the predicted value for evolutionary ratings of Black people increases by about 4 points from the pre-

election to the post-election wave. At the extreme high end of the Trump thermometer, meanwhile, in which respondents report the warmest possible feelings toward Trump, the predicted value for evolutionary ratings of Black people decreases by about 2 points from the pre-election to the post-election wave. The null aggregate findings reported at the beginning of this section did indeed mask countervailing trends.

To be clear, these effects are not enormous; while the y-axis is truncated so that the pattern can be easily observed, the full range of the variable of evolutionary ratings of Black people is from 0 to 100. The observed changes are nonetheless meaningful. When it comes to evolutionary ratings of racial groups, even a difference that appears quantitatively small can reflect a qualitatively meaningful distinction. As Jardina and Piston (2022) observe: “any difference in the degree of humanity one ascribes to various racial groups is important, especially since it is linked to political preferences” (10). Future research might build on these findings by examining the consequences of this polarization in the expression of racially-dehumanizing attitudes for social and political life.

Finally, we conduct two placebo tests in order to assess the veracity of our interpretation that Trump’s electoral victory in 2016 polarized expressions of racially-dehumanizing attitudes. First, if indeed it is Trump’s rhetoric that polarized white Americans, it should be warmth toward Trump and only warmth toward Trump that moderates changes in evolutionary ratings of Black people over time. Evaluations of other politicians should not condition these effects. Fortunately, a feeling thermometer toward Hillary Clinton is available (see Appendix 3b for the distribution of this variable), and we use that thermometer in place of variable measuring warmth toward Trump, in an analysis otherwise identical to that reported in Table 1. As expected, the coefficient on the Clinton thermometer is much smaller in magnitude ( $-1.73$ ) than the coefficient on the Trump thermometer was ( $-7.34$ ). Furthermore, the

Clinton thermometer coefficient, unlike the Trump thermometer coefficient, is statistically indistinguishable from zero – less than half the size of its standard error (3.53). Consistent with the argument that it is Trump in particular that affected the expression of racially-dehumanizing attitudes, we find that support for Hillary Clinton is not associated with changes in evolutionary ratings of Black people over time.

Second, if it is indeed Trump's dehumanizing rhetoric toward Black people that affected evolutionary ratings of Black people, the patterns observed above should not hold when it comes to evolutionary ratings of white people. We therefore conduct an additional analysis that is again identical to Table 1 except for one change: the dependent variable becomes post-election evolutionary ratings of white people (instead of Black people) while a key control variable becomes pre-election evolutionary ratings of white people (instead of Black people).<sup>6</sup> As expected, we find no association between feelings toward Trump and changes in evolutionary ratings of white people. The coefficient on the Trump thermometer is small (0.46) and statistically indistinguishable from zero – much smaller than the standard error (3.11). Both placebo tests suggest that changes in the expression of whites' racially-dehumanizing attitudes over time can indeed be characterized as a polarizing effect of Trump's victory in the 2016 presidential election.

## Conclusion

Many scholars have demonstrated that Trump's victory influenced expressions of racial prejudice in the U.S. We build on this work by providing evidence suggesting that Trump's election had a polarizing effect on the expression of *dehumanizing* racial attitudes. We find that Trump supporters became, on average, more willing to report dehumanizing attitudes about Black people. At the same times, we also find that this trend was countered by the fact that Trump's opponents became less likely to endorse dehumanizing portrayals of Black people. Our results therefore imply that political elites' efforts to exploit white racial attitudes using explicit racist messaging can be effective. That said, efforts to sanction elites' violations of norms of racial equality may serve to transform attitudes among other whites in a way that serves as a countervailing force.

Does the over-time variance in the expression of racially-dehumanizing views of Black people observed here result from genuine attitude change, or from changing perceptions of social norms about the expression of racist attitudes? While our data do not allow us to adjudicate between these two mechanisms, it may well turn out that both mechanisms are operating simultaneously. Future work could investigate this possibility (see Engelhardt, 2023), measuring or directly

## Appendix 1. Question Wording and Item Coding

### *Warmth toward Trump and Clinton*

We'd like to get your feelings about some of the people who are in the news these days. We'll show the name of a person and we'd like you to rate that person using something we call the feeling thermometer.

<sup>6</sup> Other research (Jardina & Piston 2022) uses a difference measure, in which evolutionary ratings of Black people are subtracted from evolutionary ratings of white people, as the key independent variable. Such a decision was appropriate for the purposes of that study because it allowed the researchers to determine "whether, and the extent to which, the respondent believes Blacks are less evolved than Whites" (p. 1085). The decision made here is slightly different, as this study has different purposes, but it follows the same logic. We expect that evolutionary ratings of Black people, but not evolutionary ratings of white people, will change after Trump's electoral victory, and therefore look at the two measures separately.

manipulating perceptions of social norms, or manipulating exposure to the racially-dehumanizing rhetoric of a political elite and subsequently asking respondents their perceptions of social norms.

Of course, Trump's racist rhetoric did not exclusively target Black Americans; indeed, his characterizations of Muslims and Latinx immigrants, among others, were often virulent and hateful, and numerous studies suggest that Trump influenced the expression of views toward these groups as well (Enns and Jardina, 2021; Jardina, 2019a; Jardina and Stephens-Dougan, 2021; Schaffner et al., 2018; Schaffner and Hall, 2018; Schaffner, 2020; Telhami, 2017). However, existing work on this topic does not typically examine the possibility that Trump's rhetoric influenced not only the expression of garden-variety forms of racial prejudice but also sentiments that are explicitly racially-dehumanizing. The topic of racially-dehumanizing attitudes toward groups beyond Black people, and in particular the possibility of changes in the expression of such attitudes, is ripe for future research.

Future research might also examine what happens when elites sanction those politicians who rely on racially-dehumanizing rhetoric. As Romney's "trickle-down racism" critique highlighted at the beginning of this manuscript shows, there were instances – albeit few and far between – in which in-partisans attempted to hold Trump accountable for his racist words. We suspect that in-partisan critiques are especially useful, though by no means foolproof, for increasing the penalties to those politicians who use dehumanizing rhetoric. Given the importance of racially-dehumanizing rhetoric and attitudes to contemporary social and political life, it is vital that scholars identify pathways to minimize their prevalence and expression.

## Ethics and informed consent

This study was approved by the Duke University Institutional Review Board (Protocol D0426) – "Measuring White Dehumanization of Blacks" (2016).

Written informed consent was obtained from survey respondents who participated in the study.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

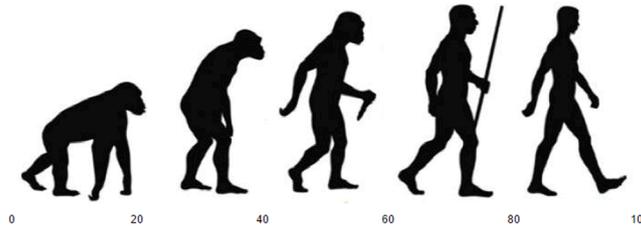
Data will be made available on request.

Ratings between 50° and 100° mean that you feel favorable and warm toward the person. Ratings between 0° and 50° mean that you don't feel favorable toward the person and you don't care too much for that person. You would rate the person at the 50° mark if you don't feel particularly warm or cold toward the person.

Donald Trump  
Hillary Clinton

#### *Evolutionary ratings of racial groups*

Using the image below, please indicate using the sliders how evolved you consider the average member of each group to be:



blacks whites

#### *Party identification*

*Party ID:* This variable is the standard seven-point scale.

First respondents were asked: "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?"

Respondents who answered "Republican" were then asked a follow-up question: "Would you call yourself a strong Republican or a not very strong Republican?"

Respondents who answered "Democrat," meanwhile, were asked a similar follow-up question: "Would you call yourself a strong Democrat or a not very strong Democrat?"

The remaining respondents were asked: "Do you think of yourself as closer to the Republican Party or to the Democratic Party?" [Response options: Closer to the Republican Party, Closer to the Democratic Party, Neither]

The resulting seven-point variable was constructed, following standard practice, such that strong partisans were at the extreme values "1" and "7," weak partisans took on the values "2" and "6," leaners took on the values "3" and "5," and pure independents were coded "4." Finally, the variable was transformed onto a 0–1 scale, such that higher values reflected attachment to the Republican Party.

#### *Education*

What is the highest level of education you have completed? [Response options: No high school; High school graduate; Some college; 2-year college degree; 4-year college degree; Post-graduate education]

#### *Age*

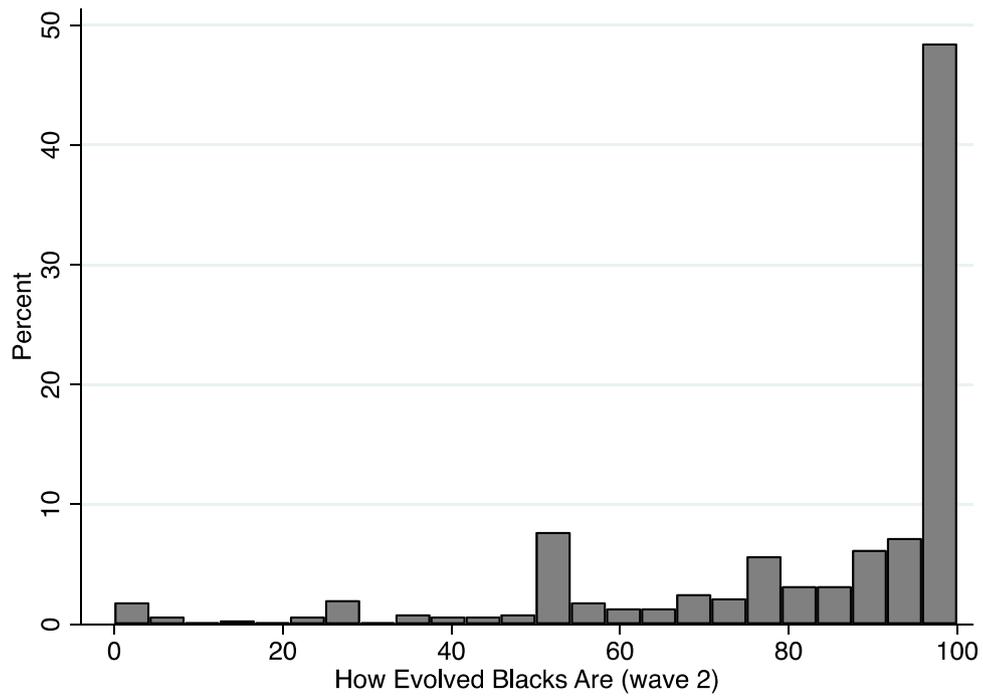
In what year were you born?

#### *Gender*

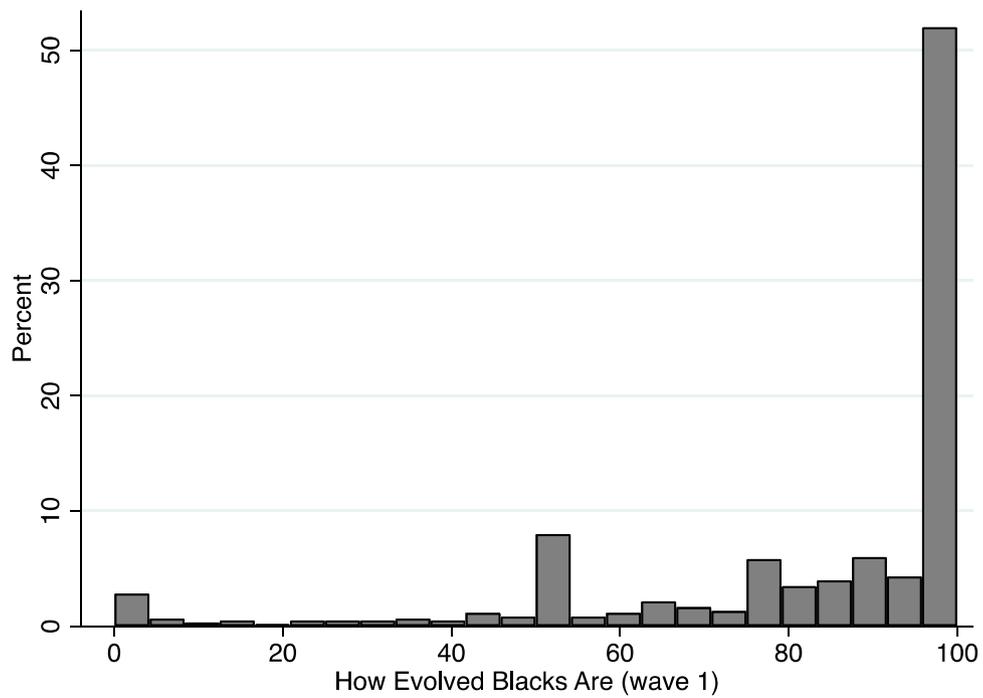
Are you male or female?

Appendix 2: Distribution of Evolutionary Ratings of Black People (unweighted)

1a. Wave 1

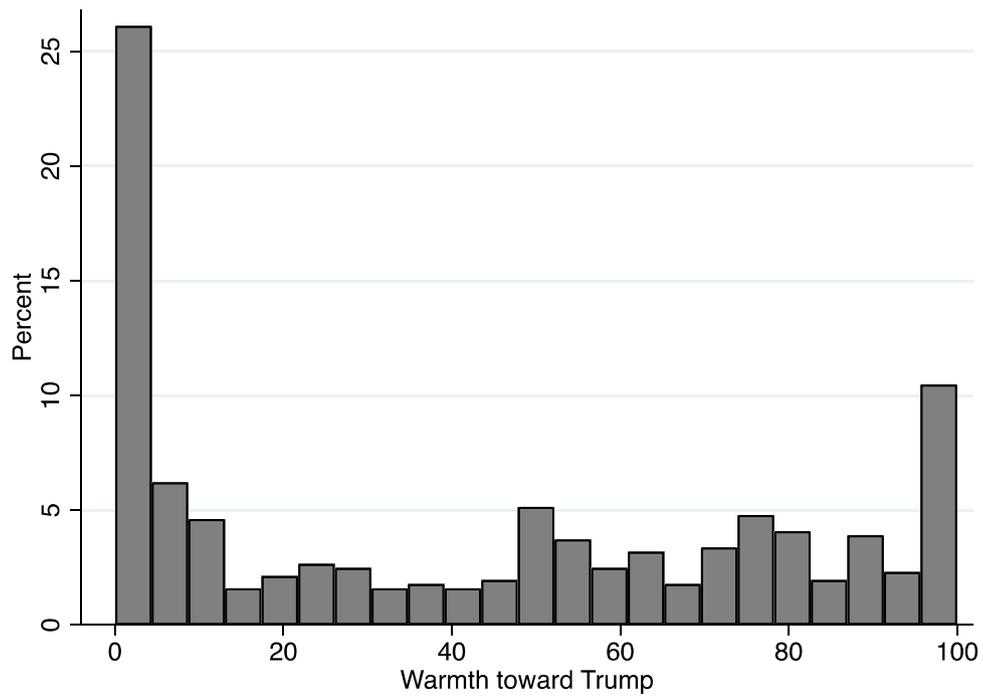


1b. Wave 2

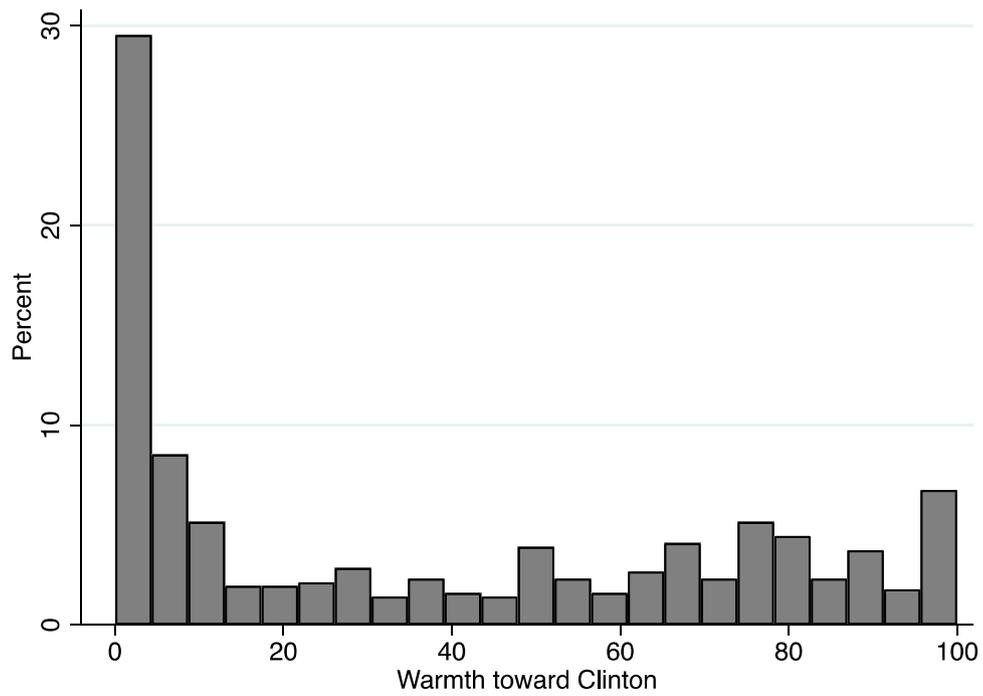


Appendix 3: Distribution of Warmth Toward Politicians (wave 1; unweighted)

3a. Trump (mean = 42.34; standard deviation = 36.18)



3b. Clinton (mean = 36.63; standard deviation = 35.50)



## Appendix 4: Regression models on which Fig. 1 is based

	Evolutionary ratings of Black people (wave 1)	Evolutionary ratings of Black people (wave 2)
Warmth toward Trump (wave 1)	-2.99 (4.87)	-8.86* (4.01)
Party identification (Republican)	-7.30 (4.86)	0.22 (4.01)
Education	0.11 (5.71)	2.97 (3.99)
Age	9.80 (6.44)	8.68* (4.69)
Gender (male)	1.91 (3.01)	0.65 (2.29)
Constant	80.56*** (5.95)	80.34*** (3.77)
Observations	546	546
R-squared	0.02	0.03

Source: 2016 YouGov Study. Cell entries are ordinary least squares regression coefficients. Data are weighted.

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