Scholars regularly measure whites’ racial attitudes using symbolic racism and, more rarely, overt prejudice. We examine the predictive power of both measures in explaining anti-black discrimination. In Study 1 we obtain a behavioral measure of racial discrimination using the Ultimatum Game (UG). We find that white responders engaged in costly discrimination against black proposers by rejecting offers they would otherwise accept from whites. Overt prejudice predicts which whites discriminate whereas symbolic racism does not. In Study 2, white third-party observers evaluate intergroup interactions in the UG, and overt prejudice predicts racially biased evaluations of the fairness of resource distributions made by black proposers to white responders, but symbolic racism does not. Finally, we re-analyze a published candidate choice experiment and find that overt prejudice predicts discrimination against a black candidate, relative to an otherwise equivalent white one. These results demonstrate the enduring importance of overt prejudice in American politics.

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Intergroup conflict and persistent racial inequality are distinguishing features of American politics. Enduring anti-black attitudes, in particular, are a prominent feature in explanations for America’s many institutional exceptionalisms (e.g., Smith 1993), including the comparative absence of social welfare institutions (e.g., Gilens 1999). Most accounts, either explicitly or implicitly, assume strong connections between racial prejudice and both preferences for discriminatory policies and the discriminatory behaviors of white Americans. Consequently, the study of racial prejudice is of crucial importance to advancing our understanding of how racial attitudes shape politics in the United States.

Despite this enduring interest in racial attitudes, important questions remain about the theoretical underpinnings of different measures of those attitudes. Two important survey measures of explicit (outwardly expressed) racial attitudes are overt racial prejudice—the degree to which whites believe in the relative group-level inferiority of blacks—and “symbolic racism” (also called “racial resentment” or “modern racism,” see Hutchings and Valentino 2004 for a review). Symbolic racism has been operationalized as a blend of both anti-black prejudice and traditional moral values potentially at odds with government efforts to rectify the consequences of historical discrimination (e.g. Sears and Kinder 1971; Kinder and Sears 1981). Whites have continued to express high levels of symbolic racism long after changes in social norms rendered outward expressions of hostile prejudice unpopular. Emphasizing the importance of symbolic racism, Kinder and Sanders (1996) argued that while overt prejudice—based in perceived black inferiority—may have declined after the Civil Rights movement, “a new form of racial prejudice has appeared” (p. 97–98).

Accordingly, research in political science using measures of symbolic racism has largely displaced research using measures of overt prejudice. In this paper, we present evidence that overt prejudice—based in negative beliefs about group-level differences between blacks and whites—is an important feature of contemporary white attitudes that predicts individual-level anti-black discrimination.

1 The ANES has included a 4-item symbolic racism scale in surveys since 1986. Measures of overt prejudice have only sometimes appeared. See Supplementary Appendix (SA) for details.
and candidate choice. This suggests the dismissal of overt prejudice as a predictive measure in American politics was premature.

The classic definition of prejudice is “an antipathy based on faulty and inflexible generalization.” (Allport, 1954, p. 9). Discrimination, on the other hand, is the act of “[denying] individuals or groups of people equality of treatment which they may wish” because of their group membership (pp. 51-52). Prejudice is therefore a negative evaluation of another person based on their group membership, whereas discrimination is a negative behavior toward that person (e.g. Dovidio and Gaertner, 1986). Although prejudice is often used to predict discrimination, the two are not synonymous. Indeed, a classic result in social psychology is that prejudicial attitudes expressed in surveys may poorly predict discriminatory behavior (e.g. La Pierre 1934). Historically, overt racial prejudice was the justification for both personal and political (state sponsored) discrimination against blacks, and whites endorsed negative stereotypes of blacks at high levels. It follows that overt prejudice should explain an individual willingness to discriminate, but contemporary behavioral tests of explicit (survey based) measures of overt prejudice do not appear to exist. Alternatively, however, social desirability biases may cause individuals who are willing to discriminate to underreport their true level of overt prejudice (see Schuman et al. 1997), which would reduce the predictive power of the measure.

Symbolic racism, on the other hand, is conceptualized as a post-civil rights era attitude that emerged after hostile expressions of bigotry and white supremacy were rendered unpopular. This new form of racism was “not the racism of the red-neck bigots of old who spewed forth hatred, doctrines of racial inferiority, and support for de jure segregation” (McConahay and Hough 1976, p. 23). Rather, it reflected an evolution in white racism that affected a broader segment of American society. Symbolic racism is a core component of political science research that is regularly used to predict whites’ attitudes about policies addressing racial inequality as well as candidate choice (e.g. Pasek et al. 2009).

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2 For example, in 1942 nearly 60% of whites believed “Negroes” were less intelligent than whites, but by 1956 only 20% expressed support for racial intelligence differences (see Hyman and Sheatsley 1964).
Yet the link between symbolic racism and discrimination is less clear, and whether symbolic racism is prognostic of discrimination against blacks is largely untested. Further, the correlation between conservative political choices and symbolic racism has been challenged as evidence of construct validity. Such ambiguity is heightened by the fact that the survey items used to measure symbolic racism invoke a variety of conservative social value orientations (see Huddy and Feldman 2009 for a review). Those values, rather than racial prejudice, may be one reason individuals who score high on measures of symbolic racism oppose liberal policies and liberal (black) candidates (e.g., Sniderman and Tetlock 1986).

Our reading of this debate about the validity of the symbolic racism measure is that its critics are arguing that one needs evidence other than the measure’s predictive power in racialized policy domains to validate it is a measure of prejudice that predicts a willingness to discriminate on the basis of race. Although the two measures (overt prejudice and symbolic racism) both predict racial policy attitudes, this is not evidence that they do so for the same reason (Carmines, Sniderman, and Easter, 2011). If symbolic racism explains a willingness to discriminate, it is natural to understand it as sharing a prejudicial and discriminatory impetus, whereas if it does not (but overt prejudice does), then overt prejudice and symbolic racism are conceptually distinct in at least one important way. Further, if overt prejudice predicts anti-black discrimination in political contexts then it also has utility for understanding contemporary American politics. In this case, symbolic racism may still offer important insight into whites’ policy views and political behaviors, but not because it captures a willingness to engage in discrimination against black individuals.

This research examines whether these explicit attitudes explain anti-black discrimination by white Americans. We first obtain behavioral measures of racial discrimination using a non-anonymous version of the Ultimatum Game (UG). In the UG, a player in the role of proposer offers a division of a fixed endowment between herself and a responder. If the responder accepts the offer, each side receives their portion of the division, but if the responder rejects the offer, both players receive nothing. Rejecting a non-zero offer therefore requires that a responder give up real money to deny the first mover her proposed
share of the endowment. We find that white responders were more likely to engage in costly discrimination against randomly assigned black proposers by rejecting offers. More importantly, we demonstrate that overt prejudice reliably distinguishes which whites discriminate whereas symbolic racism does not.

In a second experiment, we explore whether this discrimination is motivated by racially biased fairness perceptions using an evaluation experiment in which whites act in the role of third-party observers to rounds of UG play between randomly assigned pairings of proposers and responders. Although this is not a behavioral measure of racial discrimination, it provides additional support for the mechanism driving biased rejections in the UG: whites hold blacks to a higher standard than other whites. Further, overt prejudice predicts racially biased evaluations of the fairness of resource distributions made by black proposers to white responders but symbolic racism does not, suggesting racially biased conceptions of fairness are a plausible explanation for the discriminatory behavior of prejudiced individuals.

Finally, we examine whether these findings extend to behavior in the context of candidate choice by re-analyzing a 2012 experiment from the TESS archive. In this experiment, subjects were randomly assigned to evaluate and choose between two hypothetical political candidates, one of which was randomly assigned to be black or white (see Krupnikov and Piston, 2015). We find that in a contest without party labels the subset of whites who express overt prejudice were 15 percentage points less likely to choose a randomly assigned black (versus white) candidate running an ad against a white candidate.

**Research Overview**

We first investigate the link between prejudice and discrimination in two novel experiments. Study 1 measures costly discrimination in one-shot Ultimatum Game (UG) play by 738 white responders. Responders were randomly assigned to either a 4 second (time pressure) or 10 second (time delay) decision constraint for the entire experiment and then answered an opinion survey that included measures
of symbolic racism and overt prejudice. All responders played 30 rounds of the UG against 30 unique proposers, 25 of whom were white or black. The race of the proposer and offer amount were independently randomly assigned. This allows us to test the predictive power of explicit racial prejudice in explaining discrimination. We can also examine whether discrimination is affected by dual process cognition (e.g. Kahneman, 2011), which we manipulated by altering the speed with which respondents must make choices.

The standard behavioral prediction for the anonymous one-shot UG is that the responder will play the sub-game perfect Nash equilibrium and accept any positive (non-zero) offer, and the proposer will offer the smallest possible division (Güth, Schmittberger, and Schwarze 1982). Experimental regularities across a variety of human societies show, however, that most proposers offer between 30% and 50% of the endowment and that responders frequently reject offers of less than 20%. A common interpretation of this pattern is that responder behavior is motivated by a social preference to punish proposers who make offers they perceive as unfair, and that proposers anticipate this (Henrich et al. 2001).

The responder’s desire to punish unfair offers may be even greater in non-anonymous one-shot UGs when the proposer is a member of an out-group. In general, in-group bias is stronger when the groups are made salient with realistic categorizations such as race and ethnicity, but group identity can even be established on the basis of arbitrary differences such as preferences for paintings (e.g. Tajfel et al. 1971). Numerous studies have shown evidence of in-group favoritism in resource allocations, often using this “minimal group paradigm” setup (see Lane 2016; Balliet, Wu, and De Dreu 2014 for meta-analyses). Kubota et al. (2013) provide evidence of costly discrimination by white responders against black proposers in the UG and show this is predicted by implicit racial prejudice as measured using the Implicit Association Test (IAT). They note this discrimination may be driven by racially prejudiced responders perceiving offers from blacks as less fair than equivalent offers from whites.

Although Study 1 allows us to examine the relationship between prejudice and behavior, it does not directly examine the perceived fairness of offers across intergroup bargaining scenarios. If white respondents indeed view offers from blacks to whites as less fair than otherwise equivalent offers between
whites, this should be reflected in the perceived fairness of resource allocations in UG negotiations. Study 2 therefore examines how 753 white third party observers perceive allocations in rounds of UG play between white and black proposers. In this experiment, each evaluator rated the fairness of the proposer’s offer in 36 rounds of the UG between 76 unique responders and proposers. The racial pair and offer amounts were independently randomly assigned. This allows us to test how the racial pair affects perceived offer fairness, and whether the racial attitudes of third-party observers predict biased fairness evaluations.

**Study 1**

In Study 1 we recruited 931 unique workers from Amazon’s Mechanical Turk (MTurk) marketplace (see Berinsky, Huber, and Lenz 2012) and achieved a sample of 738 white workers. The instructions for the UG were explained and subjects were required to answer comprehension questions before proceeding (see SA for further details about the experiment). Subjects were informed they would always be in the role of the responder and play the game 30 times with 30 unique proposers. Subjects were randomly assigned to a time pressure (“Fast”) or time delay (“Slow”) decision constraint for the entire experiment. In the Fast condition, subjects were allowed a maximum of 4 seconds to decide whether to accept or reject the proposer’s offer. In the Slow condition, subjects were required to spend a minimum of 10 seconds before deciding. The 30 putative proposers were in fact a randomly selected subset of 160 male faces with neutral expressions (15 white, 10 black and 5 non-white/non-black faces) from the face database used by Kubota et al. (2013). All subjects were exposed to the same set of 30 faces, presented in a random order, with a randomly drawn offer amount (out of an initial endowment of $1.00) between $0.00 - $0.60. After the subject completed 30 rounds of play they completed an opinion survey that captured demographic covariates and racial attitudes.³ In all analyses, we restrict attention to the 738

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³ We measure racial attitudes post-treatment, like Kubota et al. (2013), to avoid priming subjects’ racial attitudes before playing the UG. Prior research finds that racial attitudes are socialized early and remarkably stable over time, reducing concerns that playing the UG affected racial prejudice (see Sears 1988).
white responders in 25 rounds of play against black or white proposers (738 x 25 rounds = 18,450 potential observations).

Although the design of Study 1 is similar to Kubota et al. (2013), it has important differences. First, and most central for our purposes, the measures of racial prejudice included in our study are different. Kubota et al. (2013) measured implicit racial bias using the IAT, whereas we employ explicit measures of racial attitudes. Second, unlike Kubota et al. (2013), we did not instruct responders to accept offers they considered to be fair. Third, the larger number of subjects recruited for this study came from an online labor market and played 30 rounds of the UG, whereas Kubota et al. (2013) recruited 49 subjects from the New York University area. Finally, this study randomly assigned subjects to two different decision scenarios whereas Kubota et al. (2013) only investigated behavior under the Fast condition.

**Study 2**

In Study 2 we designed an evaluation task to explore how whites in the role of a third party observer perceived intergroup resource allocations in the UG. If whites impose different fairness standards on black proposers’ behavior toward white responders, this should lead to differences in their evaluations of the fairness of proposed monetary splits across racial pairs. Given that whites in Study 1 were more likely to reject comparable offers from black proposers, we therefore expected that whites would evaluate offers from whites to whites more positively than offers from blacks to whites. We also compare fairness evaluations of offers to black responders from both white and black proposers to rule out the possibility that all intergroup interactions are simply evaluated differently.

The evaluation task was administered in the second wave of an online panel study. In Wave 1, a target population of white Americans was recruited from Survey Sampling International (SSI) for a public opinion survey that included demographics and measures of overt and symbolic racism. To minimize potential demand effects associated with measuring racial attitudes and evaluations in the same survey,
approximately 10 days later all subjects who completed the Wave 1 survey (N=1715) were invited to Wave 2 (60%, N=1029, completed), a putatively unrelated study on decision making (see SA for details).

In Wave 2, subjects were shown images from 41 rounds of play in the UG and led to believe the rounds had already occurred between real humans. Subjects were asked to evaluate the fairness of the proposer’s offer and the likelihood the responder accepted. Offer amounts were randomly assigned. The racial pairs, 82 unique faces sampled without replacement from the face database, were randomly assigned across the 41 unique UG rounds.

For each round of play, subjects were first asked “How fair was the Proposer’s offer?” Responses were captured using a continuous sliding scale from “completely unfair” (0) to “completely fair” (100), where “neither fair nor unfair” (50) served as a neutral midpoint. Next, subjects were asked “How likely is it that the Responder accepted the offer?” Responses were captured using a continuous sliding scale from “certainly did not accept” (0) to “certainly accepted” (100). As with the individual decision-making experiment (Study 1), the UG was explained and subjects were required to answer comprehension questions about at least one practice round of the UG (see SA for details). In all analyses presented in this paper we restrict attention to 741 white evaluators who passed a comprehension test and completed at least 75% of the evaluations assigned to them. We focus on their evaluations in the 36 instances of UG play involving black or white proposers and responders (741 x 36 rounds = 26,676 potential observations).

Measures of Overt Prejudice and Symbolic Racism

Our measure of overt prejudice is derived from subjects’ responses to 4 questions about perceived group-level differences in trustworthiness, violence, work-ethic and intelligence that have previously been included in various public opinion surveys (see Huddy and Feldman 2009). Each responder provided a measure on each of the four dimensions using a 7-point scale for each of four groups — Asians, blacks, Hispanics and whites. For each trait individuals were asked to evaluate all four groups simultaneously so that relative differences among groups were both visually and numerically apparent (see SA). These
responses therefore capture beliefs about group-level differences. We scale responses for each item so that a positive difference for “whites” versus “blacks” indicates belief in group-level white superiority. The white-black differences for each of the questions are combined by summing and dividing by 4 to create our *Overt Prejudice Scale* with range [-6,6].

Racism is a broad term and researchers employ different measurement strategies (see Dovidio and Gaertner, 1986). While contemporary political science research on explicit prejudice has emphasized the importance of whites’ beliefs about blacks’ commitment to “the work-ethic” (e.g. Gilens, 1999), what we call overt prejudice refers to perceived racial differences on four stigmatized character traits that have been widely used to caricature black people as a homogenous group and reinforce narratives of racial inferiority throughout U.S. history (see Bobo and Charles, 2009). Combining multiple measures, as opposed to using a single item, has the added advantage of reducing measurement error.

This approach to measuring overt prejudice is most similar to Huddy and Feldman’s (2009) conception as “negative feelings toward blacks and a belief that blacks are inherently inferior to whites.” However, our measure differs in two respects. First, we do not classify respondents on the basis of affect. This is because feelings of affinity could originate in many sources, including, for example, political competition. Second, we do not incorporate why whites believe blacks to be inferior. Rather, we focus simply on assessments of blacks as being inferior to whites. Thus, these items are solely about group differences and do not invoke evaluations of existing political outcomes (e.g., getting what one deserves) or explanations for those outcomes (e.g., slavery and discrimination). Our measure is also related to what some have called “old-fashioned” prejudice, although many of those measures interrogate respondents’ beliefs about specific causal attributions (see Huddy and Feldman, 2009).

The measure of symbolic racism we use is identical to the 4-item battery of questions asked on various waves of the ANES survey since 1986. Respondents were asked to agree strongly, somewhat, neither agree nor disagree, disagree somewhat, or strongly with four statements:

1. Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.
2. Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class.
3. Over the past few years, blacks have gotten less than they deserve.
4. 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.

We note that these items potentially invoke a larger and more ambiguous set of considerations than our measures of overt prejudice. For example, the first question asks agreement with 1) a statement about the historical behavior of certain groups, 2) a comparison of their behavior to blacks, and 3) “special favors” for blacks. Although statement 4 does make a contrast between blacks and whites, unlike our measure of perceived group-differences in laziness, it also explicitly invokes considerations about the “return to effort” as an explanation. We construct the Symbolic Racism Index with the canonical transformation used in prior empirical studies (e.g. Tesler 2012). Responses to each of the questions are coded from 0 to 1 by .25 increments (0.5 a neutral midpoint) then summed and divided by 4 (the number of questions) to make a scale with range [0,1].

Prior empirical work on whether symbolic racism predicts individual-level discrimination is ambiguous. In a 2x2 factorial experiment with 81 white undergraduate subjects, McConahay (1983) found those scoring high on racial resentment, measured with the Modern Racism Scale, evaluated a resume with a photo of a black (versus a white) job applicant less favorably when this resume was presented first, but more favorably after viewing a mix of more and less qualified resumes without photos. This finding suggests symbolic racism does not always lead to a willingness to discriminate against a black individual. In a related study, Brief et al. (2000) found that baseline levels of racial resentment did not predict discrimination in resume evaluations because both low and high racism individuals recommended hiring an equal number of black candidates. However, directives from a business superior that explained white candidates work better with white co-workers led both high and low racism subjects to recommend fewer black candidates, but the effect was larger for those that scored higher on survey

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4 The Modern Racism Scale is different from the “Symbolic Racism 2000 Scale (SR2K)” introduced by Henry and Sears (2002) that serves as the basis for the ANES measures. Modern Racism is derivative of Symbolic Racism and, in the past, these were the same concept and measure (Henry, 2010). The scale used in McConahay (1983, p. 557) is the same scale used in the seminal study of symbolic racism by Kinder and Sears (1981).
measures of racism. What is unclear is whether this difference reflects a greater desire to discriminate or greater deference to the leader’s directive.

There is also little extant research on whether overt prejudice explains either individual-level discrimination or choice in political settings. One argument that led researchers away from using measures like the overt prejudice scale we employ is that social desirability concerns may motivate respondents to rate all groups equally (Huddy and Feldman 2009). These critiques are generally directed at face-to-face or telephone interview modes. Web administered surveys, by contrast, increase respondents’ reporting accuracy and willingness to disclose sensitive information (Kreuter, Presser, and Tourangeau 2008). Consistent with this, we find that a substantial proportion of respondents are willing to endorse negative stereotypes of blacks (compared to whites).

Figure 1 plots the univariate distributions of the overt (Panel A) and symbolic measures (Panel B) for the analysis samples of white subjects from both Study 1 (MTurk, N=738) and Study 2 (SSI sample, N=741), as well as their bivariate relationship (Panel C). In Study 1, 42% of the white responders endorsed group-level black inferiority and therefore have positive scores on the overt prejudice scale (scale reliability alpha of 0.78). In Study 2, 59% of the white evaluators scored above 0 on the overt prejudice scale (alpha = 0.73). The mean level on the -6 to 6 overt prejudice scale is 0.44 among white responders in the MTurk sample and 0.45 among the white evaluators in the SSI sample. These patterns undercut concerns that survey respondents are unwilling to express overt anti-black views.

The mean symbolic racism score among white responders in the MTurk sample (alpha = 0.91) was 0.50 and 46% of respondents were coded as symbolic racists (Symbolic Racism Index > .5), while in the SSI sample (alpha = 0.88) the figures were 0.56 and 52%. The latter figure is comparable to the average score among white Americans according to the 2016 wave of the ANES survey (unweighted

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5 Piston et al. (2018) shows that overt prejudice explains differences in evaluations of vague versus specific statements about environmental policy made by black (versus white) politicians.
mean = 0.58). The bivariate correlation between the overt and symbolic scale measures is 0.38 in the MTurk sample and 0.35 in the SSI sample.

**Results: Study 1 Racial prejudice and discriminatory behavior**

In *anonymous* one-shot UG interactions, most proposers offer between 30 and 50% of the endowment and offers below 20% are frequently rejected (see Camerer and Fehr 2004). There may be reasons to expect differences in acceptance rates when the proposer is a member of an out-group, although the expected direction of this effect is unclear. The in-group favoritism hypothesis suggests that responders will react more favorably to unfair offers from in-group proposers because the responder cares about the well-being of the proposer, which is diminished by rejecting offers. By contrast, the expectancy violation hypothesis suggests that responders will react *less favorably* to unfair offers from in-group proposers because they expect in-group members to consider their well-being by making more generous offers and react negatively to those who do not (see Fiske and Taylor 1991). For interactions between white and black Americans, prior empirical evidence finds white responders will discriminate against black proposers by rejecting their offers at higher rates (Kubota et al. 2013). No prior work that we are aware of examines how white proposers behave toward black responders, or how third-party evaluators judge the fairness of interactions between white and black proposers.

In Study 1, 69% of offers were accepted by the 738 white responders in the 25 rounds of play with black or white proposers (N = 18,228 subject-rounds). White responders were less likely to accept offers from black proposers. Figure 2 shows the proportion of offers accepted from black and white proposers at each of the ten randomly assigned offer amounts. The likelihood an offer is accepted is increasing in the offer amount, but marginally unfair offers (20-30% of the endowment) from black proposers were about 4 percentage points (p < 0.01, t-test) less likely to be accepted than offers from white proposers.

<<Figure 2 about here>>
To leverage the independent random assignment of faces and offer amounts across rounds, and to account for the within-subjects design, we regress accept/reject decisions (coded 1/0 respectively) on an indicator for the proposer’s race (black = 1, white = 0), the offer amount (indicators for amounts), and the round of play (indicators). In a second model, we also leverage the random assignment of the 4 or 10 second decision constraint and estimate an interaction between the decision condition and the race of the proposer. Table 1 presents estimates for the likelihood of acceptance from linear regressions with robust standard errors clustered at the responder level for both models.\(^6\)

| Table 1 about here |

First, confirming the graphical presentation, larger offers are more likely to be accepted. Second, controlling for offer amount and round of play (coefficients not reported) does not materially alter the finding that offers from black proposers were less likely to be accepted. On average, there was an approximately 1.3% decrease \((p < 0.01)\) in the probability a white responder accepted an offer when the proposer was black. To put this result in substantive terms, a 1.3 point difference is about 33% of the decrease in the average likelihood an offer from a black proposer is accepted when an offer is $0.40 rather than $0.50 \((4=99-95\%)\). Third, per the results from Column (2), there is no evidence of an average effect of the 10 second (“Slow”) treatment, relative to the 4 second (“Fast”) treatment, on the likelihood of offer acceptance. Further, the coefficient on the interaction between the decision treatment and the proposer’s race provides no evidence that out-group bias operated differently across the Slow and Fast decision constraints, a finding consistent with previous research designs that utilize arbitrary group distinctions (e.g. Everett et al. 2017).

Next, we turn to our core question of whether the overt prejudice and symbolic racism survey measures predict bias against black proposers in the UG. We classify “overt racists,” who score 1 on the overt racism indicator, as those who endorse group-level black inferiority (overt scale score \(> 0\)) and “symbolic racists,” who score 1 on the symbolic racism indicator, as those who exhibit a level of

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\(^6\) Alternative modelling specifications, such as Probit, or regression with subject-level fixed-effects or random-effects yield similar results. See SA for details.
symbolic racism above the (neutral) midpoint of the symbolic racism scale (symbolic scale score > .50).\footnote{This is the dichotomization used in prior work in political science, see Pasek et al. 2009. We assess the robustness to alternative approaches in the SA.} If symbolic or overt prejudice predict racial discrimination then there should be a negative coefficient on the interaction between the racial prejudice indicator and the proposer being black.

Results from three different specifications are shown in columns (3) through (5) of Table 1. The first (column 3) includes the symbolic indicator and its interaction with the proposer’s race, the second (column 4) includes the overt indicator and its interaction with the proposer’s race, and the third (column 5) estimates both interactions in the same specification. The estimates shown in column (3) reveal that non-symbolic racists were about 1.4\% less likely to accept offers from black than white proposers (p < 0.05). Symbolic racists, however, are no more likely to discriminate against offers from black proposers (the coefficient on the interaction is positive, rather than negative). Overall, this result shows that the symbolic racism measure was a poor predictor of discrimination against black proposers.

By contrast, the estimates from column (4) show that non-overt racists were about 0.5 percentage points less likely to accept an offer from a black proposer, a difference that was not statistically distinguishable from zero (p = 0.41). Overt racists, however, were about 2.5\% less likely to accept offers from black proposers (-0.5-2.0, p < 0.001), a statistically distinguishable difference of 2.0 points relative to non-overt racists (p = 0.03). The survey measure of overt prejudice is therefore a good predictor of racial discrimination, and there is little evidence that non-overt racists discriminated. In substantive terms, this 2.5 point effect represents a decrease in acceptance rates for offers by black proposers of about 4\% relative to the average 63\% acceptance rate for an offer of 15 cents, and is about 28\% of the decrease in the likelihood of acceptance associated with an offer being 15 cents rather than 20 cents (9\%).

Finally, the estimates in column (5) confirm this inference is essentially unchanged in a model that includes both interactions simultaneously.\footnote{196/728 (27\%) of responders were classified as both Overt and Symbolic Racists.} Per this specification, overt racists are about 2.3 points less likely than non-overt racists to accept offers from black proposers than white proposers (p = 0.02). For symbolic racists, as well as those who are neither overt nor symbolic racists, there is no evidence of
discrimination against black relative to white proposers (for these groups, the effect of a black proposer is indistinguishable from zero). We can reject the hypothesis that the two interaction effects are equal \( p = 0.04 \). In other words, overt prejudice is a good predictor of discrimination against black proposers, even after accounting for the possibility of different levels of discrimination among symbolic racists.\(^9\) Moreover, whether one accounts for overt prejudice or not, symbolic racism does not predict anti-black discrimination in the UG. Overall, this is the first evidence we are aware of to directly compare the predictive power of overt and symbolic racism survey measures in explaining racial discrimination, and this test reveals that overt prejudice, but not symbolic racism, predicts which individuals discriminate.

**Results: Study 2 Do fairness expectations explain why overt racists are more likely to discriminate?**

The results from the previous section established two important facts. First, whites were less likely to accept offers from black than white proposers in the UG. This is a costly behavioral measure of racial discrimination. Second, discrimination was greatest among whites who endorsed group-based black inferiority. One potential explanation for the observed behavior, suggested by prior work, is that white responders impose higher fairness standards on black proposers than white proposers. Study 2 examines whether the imposition of different fairness standards is a potential explanation for the observed behavior in Study 1.

In Study 2 we restrict attention to 741 white evaluators and 36 rounds of the UG played involving only black and white players \( N = 26,651 \) subject-rounds. While offers by white and black proposers to white responders simulate the interactions from Study 1, Study 2 also includes offers by white and black proposers to black responders. This allows us to examine whether there is something in particular about whites’ evaluations of the fairness of black behavior that extends beyond intergroup negotiations. For example, perhaps all negotiations involving black players, regardless of their role as a proposer or responder, are viewed differently by whites.

\(^9\) We present results from models including ideology, and its interaction with the black proposer in the SI. Symbolic racism is still a poor predictor of discrimination, implying the correlation between symbolic racism and ideology is not obscuring predictive power.
As expected, the results from Study 2 show a strong association between the perceived fairness of an offer and the predicted likelihood it was accepted: higher offers were on average perceived as fairer and more likely to be accepted (correlation 0.86). We find clear evidence that white evaluators, on average, viewed intergroup rounds between black and white players, as well as rounds between two black players, as systematically less fair than rounds of play between whites only. Differences in fairness evaluations for offers to whites were strongest among overt racists, who gave systematically lower fairness evaluations when offers were made by black proposers to white responders.

Figure 3 plots the relationship (averages by offer amounts) between the randomly assigned moderate offer amounts and perceived fairness for each of the 4 race pair conditions. The top two panels partition the data by the race of the responder while the bottom two panels partition by the race of the proposer. The top left panel shows that offers to white responders by black proposers (the dotted line) are perceived as less fair than offers by white proposers (the solid line) for offer amounts greater than $0.30. At the same time, the upper right panel shows that offers to black responders by white proposers (solid line) are also perceived as less fair than offers by black proposers (dotted line) over a similar range of offers.

Across all panels, the perceived fairness of an offer is increasing in the offer amount. However, intergroup offers are, on average, perceived as less fair than within-group interactions. Comparing the bottom two panels, the lower left shows that offers by whites to blacks are perceived as less fair than offers by whites to whites. In the lower right panel, which presents evaluations of offers by black proposers, there is also (more muted) evidence that offers from black proposers to white responders are perceived as less fair than offers to black responders.

We more formally investigate differences in fairness evaluations with regression analyses that appear in Table 2. Specifically, we predict fairness evaluations using indicators for offer amount, round of play, and racial pairs (*black proposer white responder* (BW), *black proposer black responder* (BB), *white
proposer black responder (WB), with the omitted reference category white proposer white responder). As
with Study 1, all specifications use robust standard errors clustered at the evaluator level.

<<Table 2 about here>>

The coefficients shown in column (1) confirm the earlier graphical presentation that intergroup
interactions are perceived as less fair. The -0.65 (p = 0.01) coefficient for BW means offers to white
responders by black proposers were, all else equal, perceived as less fair than identical offers by white
proposers to white responders. The difference WB – BB, is a nearly identical -0.61 (p = 0.03) and means
that when the responder is black offers from white proposers are also perceived as less fair than offers
from black proposers.

In columns (2) and (3) we separately examine the predictive power of the symbolic and overt
measures, respectively, in explaining these differences, while in column (4) we estimate a model with
both sets of interactions. We do so by including indicators for the binary symbolic and overt indicators
interacted with each racial pair combination (because we include all racial pair combinations for the
interaction terms, we do not include the symbolic and overt indicators separately). Substantively, our
results are somewhat affected by whether one includes the two sets of interactions separately or
simultaneously, and so we focus on the column (4) specification that accounts for the correlation between
the two racial attitude measures and which we therefore believe is more conservative.

To understand the meaning of the results presented in that specification, we begin by examining
predicted differences in evaluations of offers to white responders by white, rather than black, proposers.
For ease of interpretation, these comparisons are summarized in Panel A of Table 3. First, among non-
symbolic/non-overt racists, the average offer by a white proposer is perceived as .36 units less fair than a
comparable offer by a black proposer. This estimate is indistinguishable from 0. Among symbolic racists,
the estimate is a similar .06 units less fair, which is also indistinguishable from 0 or the estimate for non-
symbolic/non-overt racists (difference in differences [DID] = 0.30 p=.55). Both symbolic racists and non-
symbolic/non-overt racists therefore do not seem to distinguish the fairness of offers to whites by whites
from comparable offers by blacks, just as in Study 1 they did not appear to discriminate.
But among overt racists, the results are starkly different. Per these results, overt-racists evaluate offers to whites by whites as 1.08 (p = 0.02) units more fair than equivalent offers by black proposers, a DID of 1.44 units that is statistically distinguishable from the difference in evaluations by race of proposer for non-overt/non-symbolic racists (p < 0.01). Overt racists therefore appear to hold black proposers to a higher standard than white proposers when proposing resource allocations to whites. These fairness evaluations may help explain their willingness to engage in costly discrimination in Study 1.

This analysis reveals overt racists—but not symbolic racists or non-overt/non-symbolic racists—discriminate against blacks in cases in which blacks, rather than whites, propose resource allocations to whites. Does this preference among overt racists for same-race resource allocations extend to cases in which the recipient of a proposed division is black rather than white? In short, we find no evidence that it does. Panel B of Table 3 displays difference in fairness evaluations for offers to black responders by black, rather than white, responders.

Among non-overt/non-symbolic individuals we find that proposals to black responders by black proposers are perceived as .98 units more fair than equivalent offers by white proposers (p = 0.03). Among this population of whites, therefore, whites have to give more to blacks than blacks do for an offer to be perceived as equally fair. Symbolic racists also display a similar preference for in-race interactions: they rate offers by blacks to blacks as 1.18 units fairer than offers by whites to blacks (p = 0.03), although this difference is substantively and statistically indistinguishable from the behavior of non-symbolic non-overt racists (DID = 0.22, p = 0.69).

Overt racists, however, do not distinguish by the race of the proposer in interactions with black responders, rating offers by black proposers only 0.17 units fairer than offers by white proposers (p = 0.74). This -0.79 difference in differences compared to non-overt/non-symbolic racists is not statistically

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There are many potential explanations for this latter effect, including empathy, a belief blacks are worse off than whites on average and therefore have less money to give, etc. We do not have data to test or distinguish among these explanations.
significant (p = 0.16), but is suggestive that overt racists are distinct in two ways. First, they do not expect whites to give more to blacks to be as fair as when blacks interact with other blacks. Second, and more important theoretically, they do not regard all intergroup racial interactions as intrinsically unfair. Instead, overt racists regard offers to whites from blacks, rather than offers from whites to blacks, as less fair. This fairness penalty is specific to interactions in which a white person, rather than a black person, is the recipient of a proposed resource allocation.

Overall, symbolic racists and non-symbolic/non-overt racists appear to view interactions where blacks receive resources from whites as less fair than when they receive resources from blacks, while viewing interactions in which whites are the recipients of resources as unaffected by the race of the proposer. The fact that symbolic racists did not penalize resource allocations that were favorable to blacks may be surprising because high levels of symbolic racism are correlated with opposition to policies, like affirmative action, that are designed to give preferential treatment to blacks as a group. One interpretation is that symbolic racists reject policies designed to reduce racial inequality because they believe the beneficiaries of such policies are black (Rabinowitz et al. 2009). But our results suggest symbolic racists may view group targeted policies in general as unfair, which may explain why the measure does not predict fairness evaluations in situations where racial inequality is a product of individual behavior.

Overt racists, on the other hand, only view resource allocations to whites as less fair when the person who decides on the allocation is black, and view resource allocations to blacks as unaffected by the race of the proposer. In Study 1, we found that whites on average, and overt racists specifically, were distinct in being willing to engage in costly discrimination against black proposers by rejecting offers they would accept from whites. The results of Study 2 provide supportive evidence that this pattern originates in differences in fairness expectations among (overtly racist) whites when blacks, rather than whites, propose resource divisions toward whites. The unique penalty overt racists apply to black proposers in the evaluation experiment (when the responder is white) suggests they expected black proposers to give up more than white proposers when whites had the power to reject unfair offers, yet they did not expect white proposers to reciprocate when the responder was black.
Replication Study: Does overt prejudice matter in explicitly political contexts?

The results from Study 1 demonstrate that overt prejudice – rooted in whites’ beliefs about group-level black inferiority – is a strong predictor of racially biased behavior in the UG, which we argue is plausibly driven by the higher fairness standards that prejudiced whites impose on blacks who are in a position of power (Study 2). Although the UG is a valuable tool for understanding individual-level human behavior in a controlled setting, it does not necessarily follow that overt prejudice predicts discrimination in contexts where judgment and decision making are explicitly political, and potentially less costly.

One way to examine whether our main findings are applicable in the political context is to study whether overt prejudice predicts discrimination against a black political candidate who is otherwise equivalent to a white political candidate. This is challenging to study in real elections with party labels, endogenously chosen candidate positions, and other candidate traits. For example, one cannot use voting against Barack Obama to diagnose anti-black discrimination without making the strong assumption that skin color is the only relevant difference between Obama and an equivalent Democrat.

Nonetheless, prior work justifies the expectation that some white voters do discriminate against black candidates in electoral contexts. Weaver (2012), for example, showed that experimentally varying the skin color and phenotypic features of black candidates affected some white voters’ evaluations of them. Although anti-black discrimination was not apparent on average, some sub-groups (women and liberals) evaluated black candidates (those with darker skin) more positively than others (men and conservatives). In a 2x2 experiment that manipulated candidate race (black versus white) and the valence of a campaign ad (neutral versus negative), Krupnikov and Piston (2015) also found that, on average, whites did not discriminate against the black candidate. Rather, the penalty placed on the black candidate for “going negative” against a white opponent was asymmetric: whites who believed blacks had “too much influence in politics” punished the black candidate whereas sympathetic whites did not.

Importantly, the design avoided party labels such that subjects were not asked to choose between a black Democrat and a white Republican.
To our knowledge, this study is the only published work that permits estimation of the causal effect of candidate race on voter evaluations and also includes survey measures of overt prejudice (although those measures are not analyzed in the published study). Specifically, individuals were asked about racial differences in intelligence and work-ethic (two of the four measures in our Overt Prejudice Scale). We obtained the underlying data from the TESS archives and created a 2-item measure of overt prejudice (alpha = 0.65), by subtracting the black-white difference on each trait then summing and dividing by 2, such that higher values indicate more prejudice toward blacks. As before, we dichotomize this predictor so that “overt racists,” who score 1 on the overt racism indicator, are those who endorse group-level black inferiority (overt scale score > 0; 33% of the 766 respondents).

We estimate the effect of candidate race on both dependent variables used in the original study: 1) binary candidate choice (1 = chose candidate running ad against white opponent); and 2) the difference between candidate feeling thermometer ratings, scaled 0 to 1 so that values greater than 0.5 indicate warmer feelings toward the candidate running the ad. Table 4 reports the results from linear regressions for each outcome variable on treatment (black candidate) and an interaction between the black candidate treatment and the overt racism indicator. We report both weighted (columns 1 and 3) and unweighted (columns 2 and 4) analysis. Per these results, we find that whites classified as overt racists were between 18 percentage points (column 1, p = 0.01) and 16 points (column 2, p = 0.008) less likely to choose the randomly assigned black candidate. By contrast, among whites not classified as overt racists the penalty for the black candidate was between 4 points (column 1, a reward, p = 0.39) and -1 points (column 2, p = 0.80). The difference in differences is 23 points in column 1 (p = 0.009) and 15 points in column 2 (p = 0.048), both of which are substantively important effects that imply overtly prejudiced individuals are significantly less likely to choose the black candidate over an otherwise equivalent white one. The

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11 A similar finding of treatment effect heterogeneity is reported in Piston et al. (2018), a factorial experiment with 6 treatment arms and 503 non-black subjects (232 of which are non-hispanic whites). Unlike Weaver (2012) and Krupnikov and Piston (2015), this experiment focuses on a different parameter—the effect of a black (versus white) Democrat competing against a white Republican.

12 Partitioning by the tone of the candidate message produces similar results (with larger standard errors due to reduced sample sizes). These results are reported in the SA.
results are qualitatively similar for the feeling thermometer measure – the difference in difference estimates are 9 points in both columns 3 and 4 (p = 0.007 and p = 0.003, respectively).

<<Table 4 about here>>

The results from the replication study reported in Table 4 show that overtly prejudiced whites engaged in racial discrimination. This finding demonstrates that our results from Studies 1 and 2 are not limited to the individual-level decision-making context of the UG, where anti-black discrimination entails a personal cost. The key result from our analysis is that overt prejudice does predict anti-black discrimination when choosing between two politicians who are otherwise equivalent, thus demonstrating overt prejudice is consequential in the contemporary context. Unfortunately, Krupnikov and Piston (2015) included only 2 or the 4 perceived group differences measures used to construct the Overt Prejudice Scale in Study 1 and 2, and does not include the standard racial resentment index, so we cannot directly compare the predictive power of the two measures, but this is an important avenue for future research.

Discussion and Conclusion

This research provides new evidence about the nature and correlates of white discrimination against black Americans. In Study 1, we find that white Americans on average discriminate against black proposers in the Ultimatum Game. This study is, to our knowledge, the first to link this behavior to explicit attitudes about group-level black inferiority and symbolic racism. We find that overt racists—those who endorse overt negative stereotypes of blacks—were about 2% more likely to discriminate against black proposers than non-overt racists who did not appear to discriminate. By contrast, the symbolic racism measure was a poor predictor of discriminatory behavior. Overt prejudice, like the implicit racism measure using the IAT (Kubota et al. 2013), can therefore be used to identify white individuals who are willing to engage in costly discrimination against black individuals, but symbolic racism cannot.

We are unaware of any existing research that allows for such a comparison. The closest relevant work is Zigerell (2018), which finds that symbolic racism is not a reliable predictor of discrimination against black, relative to white, targets in three TESS experiments, two of which are candidate choice experiments. Unfortunately, none of these experiments also included measures of overt prejudice.
Study 2 examined whether this discriminatory behavior might be partly motivated by different views about the fairness of racial interactions by measuring how white third party observers evaluated interactions between black and white players in the Ultimatum Game. We find that whites on average evaluate negotiations over resource distributions between racial groups as less fair than racially homogeneous interactions. Among overt racists, we find that racial bias in evaluations is strongest when black proposers make offers to white responders. Overt racists therefore expect black proposers to give up more of their share when interacting with white responders, a higher standard than they impose when whites propose resource allocations to blacks. Symbolic racists do not appear to impose disproportionally higher fairness standards on black proposers’ interactions with white responders.

These results have several important implications. First, they reveal a widespread willingness by whites to discriminate, in a costly manner, against blacks (Study 1). Despite hopes for social norms of racial equality and equal treatment in the United States, at least some whites expect more from black individuals than they do from other white individuals, and are willing to make costly decisions to punish black individuals when this expectation is violated. Second, theoretically, this work documents fairness as a potential mechanism for the discrimination observed in Study 1. In Study 2, we provide direct evidence that whites expected blacks to offer more to whites than they would expect other whites to offer in order for a resource division to be perceived as equally fair. Third, we provide a means to identify using survey data those who engage in this costly discriminatory behavior. We show that overt prejudice, but not symbolic racism, predicts racial discrimination, validating this measure.

More generally, however, the fact that symbolic racism does not predict discriminatory behavior (or racially biased fairness evaluations) raises important questions about the theoretical constructs tapped by the measure. If symbolic racism were a measure of prejudice leading to a willingness to discriminate (or impose different fairness expectations on blacks when they interacted with whites over resource allocations), it would be natural to understand the correlation between symbolic racism and racially relevant policy views as sharing a discriminatory impetus. But it does not, implying that our understanding of the meaning of the symbolic racism scale cannot be that it proxies a willingness to
engage in racial discrimination. Whatever symbolic racism measures, and despite its predictive power, it is theoretically distinct from overt racial prejudice.

Research has long demonstrated that symbolic racism is associated with voters’ racially-relevant policy preferences and voting behavior. Recent studies, for example, suggest that symbolic racism is correlated with support for Barack Obama and policies associated with Obama, such as the Affordable Care Act (e.g. Tesler 2012). The results presented here, coupled with the measure’s strong association with conservatism, partisanship, and voting behavior, however, warrant caution about taking these correlations as evidence that racial prejudice leading to anti-black discrimination explains the predictive power of the symbolic racism measure. In a direct test, symbolic racism does not explain which whites engage in costly discrimination toward blacks, while overt prejudice does. Further, the predictive power of overt prejudice, which is much less correlated with conservativism and partisanship (see SA), is not limited to the individual-level behavior captured by responses to offers in the UG, but also manifests in specific decision scenarios that are explicitly political, as demonstrated by our candidate choice analysis.

The results presented here provide a new empirical foundation for ongoing discussions about the enduring nature of racial prejudice in the United States and its consequences. Symbolic racism and overt prejudice are both prominent features of white public opinion, and while the former is associated with many important political views, it is analytically distinct from overt prejudice because it does not predict an individual willingness to discriminate against blacks vis-à-vis whites. Overt prejudice, however, predicts a generic willingness to engage in anti-black discrimination at a personal (financial) cost in non-political contexts that also manifests in the act of voting against a black politician, provided an otherwise equivalent white one is available. In light of these findings, it is our view that more research should measure the prevalence and political importance of overt prejudice as defined here – the explicit endorsement of group-level white superiority.
References


Figure 1: Survey measures of racial attitudes by study

A) Distribution of Overt Racism Scale Scores

B) Distribution of Symbolic Racism Scale Scores

C) Relationship Symbolic and Overt Racism Scales

Note: Lines in panel C are lowess smoothers.
Figure 2: Study 1 Acceptance Rates by Offer Amount and Proposer Race

Proportion of Offers Accepted

White Proposer

Black Proposer

Amount offered in cents

Total N=18233
See text for details.

Data are partitioned by responder race in top two panels and by proposer race in bottom two panels.
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OLS coefficient with robust standard errors in brackets, clustered at the respondent level.
* significant at 10%; ** significant at 5%; *** significant at 1%.
Note: Coefficients (indicators) for rounds of play not reported to save space.
Table 2: Study 2 Third Party Fairness Evaluations of UG Proposals

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<td>[1.020]*</td>
<td>[1.055]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic Racist x Black Proposer, White Respondent</td>
<td>1.284</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.038]</td>
<td>[1.067]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic Racist x Black Proposer, Black Respondent</td>
<td>1.484</td>
<td>0.906</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.023]</td>
<td>[1.054]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic Racist x White Proposer, Black Respondent</td>
<td>1.464</td>
<td>0.684</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.007]</td>
<td>[1.037]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overt Racist x White Proposer, White Respondent</td>
<td>3.350</td>
<td>3.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.001]**</td>
<td>[1.041]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overt Racist x Black Proposer, White Respondent</td>
<td>1.833</td>
<td>1.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.017]*</td>
<td>[1.047]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overt Racist x Black Proposer, Black Respondent</td>
<td>2.480</td>
<td>2.239</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.010]**</td>
<td>[1.043]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overt Racist x White Proposer, Black Respondent</td>
<td>3.211</td>
<td>3.029</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.987]**</td>
<td>[1.022]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.966]**</td>
<td>[1.052]**</td>
<td>[1.106]**</td>
<td>[1.138]**</td>
</tr>
<tr>
<td>Observations</td>
<td>26651</td>
<td>26651</td>
<td>26651</td>
<td>26651</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.559</td>
<td>0.560</td>
<td>0.562</td>
<td>0.562</td>
</tr>
</tbody>
</table>

OLS coefficient with robust standard errors in brackets, clustered at the respondent level.
* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Coefficients (indicators) for offer amounts and rounds of play not reported to save space.
See Table 3 for relevant linear combination of coefficient tests.
Table 3: Study 2 Differences in fairness evaluations by race of proposer, race of responder, and racial attitudes measures

Panel A: Difference in Fairness of offers to White Responder by White rather than Black proposers
(Positive values indicate proposals by whites to white are evaluated more favorably than proposals by blacks to whites)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>p-value of difference</th>
<th>p-value of difference in differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (Non-overt non-symbolic racists)</td>
<td>-0.36</td>
<td>0.33</td>
<td>N/A</td>
</tr>
<tr>
<td>Among symbolic racists (but not overt racist)</td>
<td>-0.06</td>
<td>0.91</td>
<td>0.30</td>
</tr>
<tr>
<td>Among overt racists (but not symbolic racist)</td>
<td>1.08</td>
<td>0.02</td>
<td>1.44</td>
</tr>
</tbody>
</table>

Panel B: Difference in Fairness of offers to Black Responder by Black rather than White proposers
(Positive values indicate proposals by blacks to blacks are evaluated more favorably than proposals by whites to blacks)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>p-value of difference</th>
<th>p-value of difference in differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (Non-overt Non-symbolic racists)</td>
<td>0.96</td>
<td>0.03</td>
<td>N/A</td>
</tr>
<tr>
<td>Among symbolic racists (but not overt racist)</td>
<td>1.18</td>
<td>0.03</td>
<td>0.22</td>
</tr>
<tr>
<td>Among overt racists (but not symbolic racist)</td>
<td>0.17</td>
<td>0.74</td>
<td>-0.79</td>
</tr>
</tbody>
</table>

Note: Results are from linear combination of coefficient tests for regression model reported in column (3) of Table 2.
<table>
<thead>
<tr>
<th></th>
<th>(1) Choose Candidate Running Ad (1=yes), weighted</th>
<th>(2) Choose Candidate Running Ad (1=yes), unweighted</th>
<th>(3) Difference In Candidate Thermometers, Candidate Running Ad minus other candidate (0-1), weighted</th>
<th>(4) Difference In Candidate Thermometers, Candidate Running Ad minus other candidate (0-1), unweighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt Racist x Black Candidate</td>
<td>-0.229 [0.088]***</td>
<td>-0.148 [0.075]**</td>
<td>-0.094 [0.035]***</td>
<td>-0.087 [0.029]***</td>
</tr>
<tr>
<td>Overt Racist</td>
<td>0.047 [0.062]***</td>
<td>0.017 [0.052]**</td>
<td>0.023 [0.024]***</td>
<td>0.027 [0.019]***</td>
</tr>
<tr>
<td>Black Candidate</td>
<td>0.044 [0.052]**</td>
<td>-0.011 [0.044]</td>
<td>0.044 [0.018]**</td>
<td>0.034 [0.015]**</td>
</tr>
<tr>
<td>Constant</td>
<td>0.412 [0.037]***</td>
<td>0.432 [0.032]***</td>
<td>0.445 [0.012]***</td>
<td>0.447 [0.010]***</td>
</tr>
<tr>
<td>Observations</td>
<td>759</td>
<td>759</td>
<td>664</td>
<td>664</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.016</td>
<td>0.010</td>
<td>0.021</td>
<td>0.016</td>
</tr>
</tbody>
</table>

OLS coefficient with robust standard errors in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 4: TESS Candidate Choice Experiment: Overt Prejudice Predicts Anti-Black Discrimination