Information about Whites Becoming the Demographic Minority Does Not Influence Political or Racial Conservatism Among White Americans

Bryn McCarthy *

At the announcement of his presidential campaign in 2016, Donald Trump focused on Mexican immigrants to the United States. His statements on immigration became a centerpiece in his campaign and presidency. Political observers credited these 'social and political dynamics stemming from the very demographic shifts that had previously engendered enthusiasm among Democrats and pessimism among Republicans, namely, the increasing racial minority share of the national population,' for Trump's electoral success (Craig et al., 2018, p. 205). An increase in the nonwhite population of the United States seemingly increased conservatism among white Americans.

An extensive literature in psychology bolsters this demographic change-conservatism link, pointing to the role of racial demographic change in stoking *group status threat* and more conservative sentiments. Group status threats are threats that challenge a group's societal position relative to other groups and thus threaten control of resources. Individuals who perceive higher group status threat experience more negative emotions (Outten et al., 2012), more negative attitudes toward nonwhite outgroups (Craig & Richeson, 2014a), and more conservative policy preferences (Craig & Richeson, 2014b; Major et al., 2018).

The group status threat theory plays a dominant role in the political science and psychology literature explaining whites' reactions to immigration shifts in the last two decades. The most prominent experimental findings in this theory are found in Craig and Richeson (2014a) and Craig and Richeson (2014b), a set of two papers derived from a single set of experiments through Timesharing Experiments in the Social Science (TESS). In a series of several experiments, Craig and Richeson (2014a, 2014b) randomly assigned respondents to read about demographic shifts such that whites would be the demographic minority by 2042 or about increasing geographic mobility. Craig and Richeson found that whites in the racial shift condition expressed more negative views of nonwhites Craig and Richeson (2014b) and more conservative policy preferences Craig and Richeson (2014a).

These papers boast a combined 826 citations and have led to a cascade of research on group status threats, including highly influential papers that link the rise of Donald Trump to America's impending

*Ph.D. Candidate, Columbia University. This project was funded by the Columbia Experimental Laboratory for Social Sciences.

majority-minority status (Mutz, 2018, 727 citations). The findings are the basis for a foundational theory in American politics.

Recent work questions the consistency of these findings, noting limited evidence of the impact of racial demographic threats on political conservatism (Brown et al., 2021; Stewart & Willer, 2021). However, there has never been an exact test of the Craig and Richeson experiments. Smaller studies may raise questions regarding the influence of group status threats on Trump votes (Stewart & Willer, 2021), or claim that heterogeneous treatment effects now dominate over main effects (Brown et al., 2021), but they do not speak to the root findings of the Craig and Richeson experiments. The purpose of this research is to conduct that test.

Should we expect learning about racial demographic change to influence political conservatism? I conducted four experiments as a contemporary test of Craig and Richeson's 2014 experiment, three that varied the strength of the experimental intervention and one that performed an exact test of the original experiment.

Two findings emerged from these experiments. First, my four experiments suggest there is no relationship between information on racial shift cues and conservative policy preferences, self-placed ideology, attitudes toward nonwhite outgroups, or white racial identification. Although perceived group status threat increased, there was no association between group status threat perceptions and increased political or racial conservatism.

Second, from Craig and Richeson's 2014 data, there was a link between information about demographic change and conservative policy preferences, but previously unreported results indicate that there is no relationship between group threats and ideological self-placement. Although there is a weak link between group threats and perceptions of nonwhite racial groups, there is no relationship between group threat and other racial attitudes.

Given these findings, the link between racial demographic change and political or racial conservatism appears weaker than previously expected in 2014 and does not replicate in 2021. An examination of potential mediators offers one reason for this result: For some whites, there is a positive reaction after exposure to information on racial shifts, including increased certainty in America's future and reduced perceptions of system threat. However, results from Study 4 suggest that this rhetoric is most likely cheap talk: There was no significant shift in implicit racial attitudes after exposure to the racial shift treatment. Instead, two more likely explanations are that the original results were time-bound, or that information about demographic change is simply no longer new to most Americans.

Hypothesizing the Group Threat-Conservatism Link

Proponents of group threat theories anticipate that when individuals experience threats to their group standing, they become more defensive to maintain their dominant group status. These expectations derive from group position theory (Blumer, 1958). Under group position theory, individuals conceptualize

themselves and the groups that they are a part of in relation to the status of outgroups. For whites in the United States, these comparisons come in relation to nonwhite outgroups.

In the United States, there is a racial hierarchy in which whites sit at the top (Bobo & Hutchings, 1996; Bobo, 1999; Carter & Pérez, 2016). Groups' positions in the hierarchy are intimately related to access to resources such as education and generational wealth. Correlational research demonstrates that individuals' position in the racial hierarchy predicts opposition to immigrant outgroups (Carter & Pérez, 2016). When white Americans perceive threats to their position in the racial hierarchy, they act to maintain their group status and safeguard their access to resources (Lowery et al., 2006). Threats to group position in the racial hierarchy are conceptualized as *group status threats*.

The most common experimental stimuli manipulating group threat relates to the changing demographics of the United States. The proportion of nonwhites has increased in the United States such that whites will no longer constitute a majority of the U.S. population by 2042. Theoretically, racial shifts are anticipated to increase group threat, and thereby political and racial conservatism, because becoming the demographic minority threatens whites' hierarchical position and access to resources.

Previous experiments induced group threats among whites. Upon exposure to what Craig and Richeson call 'racial shift cues', whites display more negative emotions such as anxiety (Outten et al., 2012). They also express more conservative policy preferences across a number of issue areas, spanning both race-specific (immigration, affirmative action) and ostensibly race-neutral (defense) policy areas (Bai & Federico, 2020; Craig & Richeson, 2014a; Craig et al., 2018; Wetts & Willer, 2018). Exposure to racial shift cues also influences vote intention and may have played a particular role in the 2016 election of Donald Trump (Major et al., 2018). Racial shift cues lead to more negative perceptions of nonwhite outgroups, as group position theory would predict (Craig & Richeson, 2014b). These reactions are not confined to older generations; white millenials respond similarly to racial shift cues (Schildkraut & Marotta, 2018).

Recent findings complicate our understanding of the demographic change-conservatism link. In a series of six experiments and a subsequent meta-analysis, Stewart and Willer (2021) were unable to find evidence for a group threat-conservatism link as it related to conservative voting preferences. After exposure to a racial shift cue nearly identical to Major et al. (2018) on racial shifts in the United States, individuals were no more likely to express a Trump vote preference. Brown et al. (2021) found that although there was a relationship between racial shift cues and perceived group status threat, moderated by political ideology, there was no overall effect of the racial shift condition on conservative policy preferences.

Although these tests offer preliminary evidence that the demographic change-conservatism link does not hold, there has not previously been an exact replication of the Craig and Richeson experiments conducted in 2014. Other studies have focused on outcomes such as vote intention, but have not assessed the influence of same racial shift cue on policy preferences or outgroup perceptions. My three experiments a more definitive test of demographic change treatments over time.

My work offers a solution to the puzzle of why Craig and Richeson's 2014 results do not replicate: The reason behind the demographic change-conservatism disconnect is because white Americans report more optimistic reactions to information about whites' declining demographic status. One interpretation of this association is that white attitudes have meaningfully changed to the extent that whites no longer fear becoming the demographic minority. A more likely explanation, however, is that whites engage in expressions of racial liberalism that do not necessarily connect to their legitimate reactions to racial shift cues. In other words, social desirability bias is the reason for the group threat-conservatism disconnect. In one example, white respondents inflate evaluations of nonwhite outgroups to the extent that they rate all other nonwhite groups more positively than whites, seemingly driven by their reticence to rate whites at 100 out of 100 points on feeling thermometers. Furthermore, there is no shift in implicit racial attitudes upon exposure to the racial shift treatment. A second explanation is that information about racial shifts is no longer new to most white Americans, leading to muted reactions to racial shift cues.

Existing Research

I examine the robustness of the racial threat-conservatism link by replicating experiments conducted by Craig and Richeson in 2014 that link racial shift information to more conservative policy preferences and more negative attitudes toward racial outgroups. In an early experimental test of status threat theories, Craig and Richeson explored whether exposure to information regarding the declining status of whites in the United States influenced policy attitudes and outgroup attitudes. Although both articles employ smaller pilot findings to demonstrate the results of status threat, results from both sets of experiments were confirmed by a study conducted by Knowledge Networks through the Timesharing Experiments in the Social Sciences (TESS, $N = 415$). Due to TESS's data-sharing policy, the data from this experiment were open to public use.

In the TESS experiment, 415 white American participants were randomly assigned to receive one of two treatments. Participants in the racial shift condition read an article informing them that population demographics in the United States were shifting such that whites would be the demographic minority by 2042. Respondents in the control condition read an article on increasing geographic mobility in the United States.

Participants in the racial shift condition reported more conservative policy preferences. They also rated nonwhite outgroups (Blacks, Latinos, and Asians) more negatively on feeling thermometers relative to those in the control condition. The only potential mediator influenced by the treatment was group status threat, which mediated the relationship between the racial shift treatment and more conservative political and racial attitudes. Their findings suggest that whites exposed to information about shifting population demographics become more conservative both politically and racially, driven by whites' fears regarding the primacy of their racial group.

Replication Using Original Data

I replicated Craig and Richeson's findings using the original data from TESS. To assess the influence of racial shifts on conservative ideology, measured by policy preferences, the authors evaluated political ideology through five policy measures. The authors found a main effect of treatment condition on racial policy issues as well as race-neutral policy issues. I replicated the original analysis with a multilevel model and found a marginal main effect of treatment ($F(1,1192) = 3.7$, $p = 0.054$) and no interaction between policy type and treatment condition (see Appendix D for full replication).

The authors assessed the effect of racial shifts on attitudes towards Blacks, whites, Asians, and Latinos and reported a main effect of experimental condition on negative attitudes. Participants in the racial shift group reported more negative attitudes towards Blacks, Latinos, and Asians. I replicated the analysis with a multilevel model and found a main effect of target group: Respondents rated all racial outgroups more negatively than whites. However, I did not find a main effect of treatment condition and did not find an interaction between treatment condition and any specific target group, with the exception of Asians.

Previously unreported outcomes in the Craig and Richeson data complicate our understanding of these results. Two measures evaluating racial attitudes and one item measuring ideology returned null results. These findings run counter to the claim that racial shifts led to more conservative racial and political attitudes. A full replication of these outcomes may be found in Appendix D.

Replication using New Data

Study 1

Study 1 is an exact replication of the Craig and Richeson experiment. I recruited 891 non-Hispanic white respondents from Prolific, an online opt-in survey platform. Participants read about a projected population shift or an increase in geographic mobility. The treatments were identical to those used in Craig and Richeson (2014a, 2014b). Participants responded to several questions evaluating mediators, identical to the mediators used in Craig and Richeson, and answered questions on support for policy items, feeling thermometers toward Blacks, Latinos, Asians, and whites, and two other items on comfort around nonwhites. The survey instrument to this point was taken directly from Craig and Richeson's open-source materials. I added two outcome measures evaluating white identity strength.

Method

I surveyed 891 non-Hispanic white respondents from Prolific (442 men, 450 women; mean age = 35.48, SD = 12.72). Respondents were pre-filtered using Prolific's demographic filters. This strategy differs from Craig and Richeson's strategy in that Craig and Richeson originally recruited nonwhite participants, but weighted them with a negligible weight (0.0001) such that nonwhite participants were de facto excluded

from the analyses. The survey instrument, including question wording and order, was identical to that used in Craig and Richeson, with exceptions noted. Participants first read one of two paragraphs: One informing them that whites would be the demographic majority in the United States by 2042 (keeping Craig and Richeson's language, 'racial shift condition'), and one on increasing geographic mobility in the United States ('control condition').

Participants next completed several items on potential mediators: System threat (Jost et al., 2007), system justification (Kay & Jost, 2003), perceived uncertainty, and perceived threat to societal status (from Outten et al. (2012)). System threat was measured by two questions: One that asked participants whether they thought the American way of life was threatened (1 = *strongly agree*, 7 = *strongly disagree*), and one about their views of America's future (1 = *future getting much worse every year*, 7 = *future getting much better every year*). The items were standardized with a mean of 0 and a standard deviation equal to 1 and averaged. System justification was measured by an item that asked participants whether people usually get what they deserve in American society (1 = *strongly agree*, 7 = *strongly disagree*). Perceived uncertainty was evaluated with a question that asked respondents how certain they were about America's future (1 = *extremely certain*, 6 = *extremely uncertain*). Perceived group status threat was measured with an item that asked respondents to agree whether an increasing number of minorities will mean a reduction in whites' status (1 = *strongly disagree*, 7 = *strongly agree*).

Participants stated support for five policy positions: support for affirmative action, increased time to naturalization, increased numbers of immigrants permitted, support for universal healthcare, and support for increased defense spending. The items on immigration and affirmative action were treated as race-based policies, while the items on defense and universal healthcare were treated as race-neutral items. All policy items were standardized and averaged to create policy indices. Higher numbers correspond to more conservative policy positions in all instances. Respondents also placed themselves on an ideological scale (1 = *extremely liberal*, 7 = *extremely conservative*).

Respondents rated Black people, Latinos, Asians, and whites on a series of 101-point feeling thermometers. They responded to two items on other racial attitudes: Whether they would feel comfortable in a social setting where there were few people from their racial group (1 = *strongly disagree*, 7 = *strongly agree*), and whether they would prefer to live in a neighborhood with people of their same racial/ethnic origin (1 = *strongly agree*, 7 = *strongly disagree*).

I asked respondents two questions on white identity not included in the original articles. Respondents were given ten 'identity points' and were asked to distribute them between a white identity and an ethnic identity (e.g. German). Respondents were also asked how important being white was to their identity, a common measurement of white identity strength derived from Jardina (2019).

I conducted a multilevel model with treatment condition as the between-subjects condition and outcome (target racial group or policy type) as the within-subjects outcome, including fixed effects for participant ID. I adjusted for respondents' age, education, gender, pretreatment partisan ID (1 = *strong Democrat*, 7 = *Strong Republican*), and pretreatment self-placement ideology (1 = *strong liberal*, 7 =

strong conservative). For all other models, I conducted a linear regression with robust standard errors with the outcome measure as the dependent variable, treatment as independent variable, and adjusted for demographic controls.

The first column of Table 3 displays the multilevel model with policy type as the within-subjects condition. Respondents were more conservative overall on race-neutral policies, but respondents in the racial shift condition were no more conservative than those in the control condition on average. There was no interaction between treatment and policy type. Respondents were also no more conservative on an ideological self-placement measure.

	Policy Preferences	Feeling Thermometer
(Intercept)	-3.06^{***}	76.94^{***}
	(0.17)	(2.78)
Treatment	0.04	0.63
	(0.10)	(1.44)
Nonracial Policies	4.55^{***}	
	(0.10)	
Age	0.01^{***}	0.06
	(0.00)	(0.05)
Education	0.05	-0.20
	(0.03)	(0.45)
Gender	-0.12	-4.87^{***}
	(0.07)	(1.21)
PID	0.12^{**}	-0.47
	(0.04)	(0.61)
Ideology	0.66^{***}	-0.61
	(0.04)	(0.65)
Treatment x Nonracial Policies	-0.03	
	(0.15)	
Black		1.43
		(0.92)
Latino		2.87^{**}
		(0.92)
Asian		4.69^{***}
		(0.92)
Treatment x Black		1.11
		(1.31)
Treatment x Latino		1.46
		(1.31)
Treatment x Asian		2.25
		(1.31)
AIC	6420.66	29630.74
BIC	6480.71	29723.03
Log Likelihood	-3199.33	-14800.37
Num. obs.	1736	3472
Num. groups: id	868	868
Var: id (Intercept)	0.00	261.70
Var: Residual	2.29	185.02

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 1: Effect of Racial Shift Cue on Policy Preferences and Feeling Thermometer Scores

The second column of Table 3 displays the regression results of a multilevel model with treatment as the between-subjects condition and target racial group (Black, Latino, Asian, or white) as the within-subjects condition. Respondents across conditions rated Latinos and Asians more positively than whites

but did not rate Black people significantly differently. There was no main effect of treatment condition. There was no interaction by treatment condition or racial target group between the treatment condition and Black feeling thermometer (FT), Latino FT, or Asian FT scores.

Respondents in the racial shift condition did not express any more discomfort among racial outgroups than respondents in the control condition ($\hat{b} = 0.01, p = 0.91$). They also did not significantly express greater preferences for coracial neighbors ($\hat{b} = 0.27, p = 0.12$).

I asked respondents two questions regarding white identification that were not included in the original Craig and Richeson experiment. Respondents in the racial shift condition reported marginally greater ethnic identification over white identification ($\hat{b} = 0.27, p = 0.07$), but did not report that their race was any more important to their identity ($\hat{b} = 0.06, p = 0.48$).

The results suggest that exposure to a racial shift treatment does not influence policy preferences, ideological self-placement, attitudes toward racial outgroups, or racial identification. I analyzed potential mediators to better understand the racial shift-conservatism disconnect.

Respondents' reported sense of system justification was no different in the racial shift condition than the control condition ($\hat{b} = -0.07, p = 0.46$). Respondents unexpectedly reported lower system threat in the racial shift condition, expressing more positive attitudes about American society ($\hat{b} = -0.25, p < 0.001$). Respondents in the racial shift condition perceived less uncertainty about society's future than the control condition ($\hat{b} = -0.17, p = 0.02$). Respondents in the racial shift condition also reported an increased sense of group threat ($\hat{b} = 0.28, p < 0.001$). In comparison, respondents in Craig and Richeson (2014a, 2014b) expressed greater perceived group threat but did not express statistically different perceptions of system threat, system justification, or uncertainty.

Table 4 shows the mediation coefficients for group threat, system threat, and uncertainty on the political conservatism index, for which the variables do not successfully mediate the relationship between racial shift condition and political conservatism. Group threat, system threat, and uncertainty also do not mediate the relationship between racial shift condition and any feeling thermometer outcomes (see Appendix). In one exception, all three variables mediated the racial shift treatment and the Asian feeling thermometer. These findings are consistent with Craig and Richeson (2014b) and call for a deeper examination of attitudes toward Asians.

	Group Threat	System Threat	Uncertainty
Total effect of threat on conservatism	0.02	0.02	0.02
	(0.03)	(0.03)	(0.03)
Direct effect	0.02	0.04	0.03
	(0.03)	(0.03)	(0.03)
Indirect of treatment through mediator	0.00	−0.01	0.00
	(0.00)	(0.01)	(0.00)

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.

Table 2: Mediation Coefficients for Conservatism

Discussion

In Study 1, I conducted a test of Craig and Richeson's experiments using identical survey materials. Although the racial shift condition increased perceptions of group status threat, this increase in group status threat did not correspond to more conservative policy preferences, more negative attitudes toward racial outgroups, or differences in white racial identification.

Study 2

In Studies 2 and 3, I varied the strength and content of the racial shift treatment to evoke stronger responses in participants. In Study 2, I surveyed 368 respondents on Amazon Mechanical Turk (181 male, 187 female; mean age = 40.5, sd age = 12.1). Respondents in the racial shift condition were assigned to read a text treatment that stated that white Americans were soon projected to be the numerical minority in the United States, which could threaten the political and social status of white Americans (see Appendix). The treatment was shorter than the TESS treatment, but unlike the TESS experiment, it explicitly reminded participants that this demographic shift would likely result in loss of power (see Appendix C. for treatments). Participants in the control condition did not read any text and were asked to proceed to the following questions.

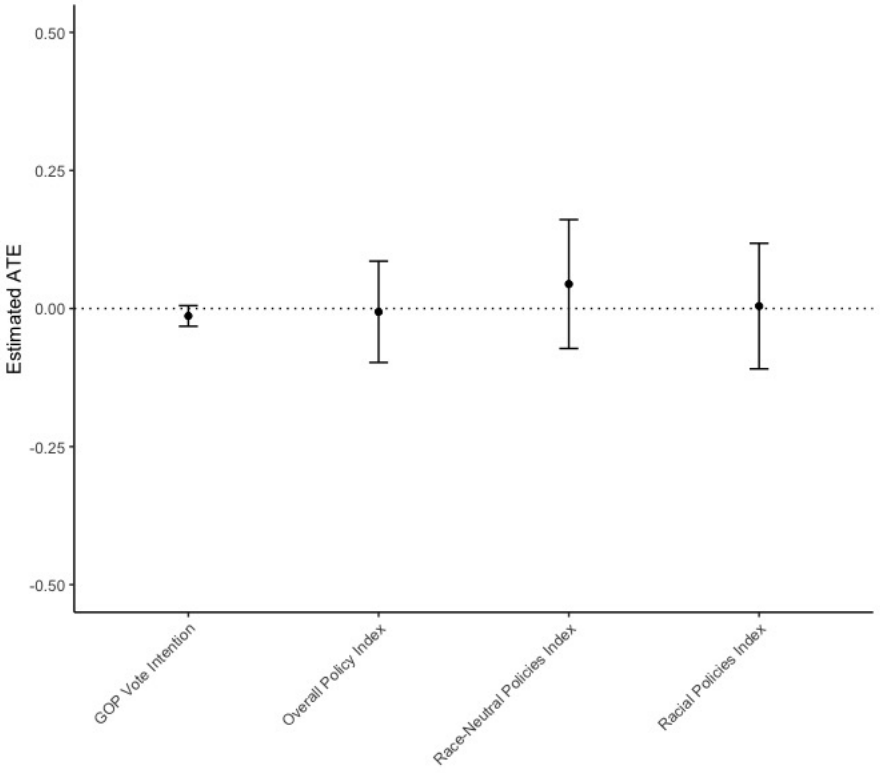
Method

Participants were asked whether they favored or opposed five policy issues: affirmative action, stronger immigration enforcement, decreasing welfare, increasing Social Security, and expanding Medicare. For all policies, higher values indicate more conservative policy preferences. The items were scaled and averaged into an overall index of policy preferences. I also constructed indexes for nonracial policies (increasing Social Security and expanding Medicare) and for policies with traditionally racial associations (opposition to affirmative action, immigration enforcement, and decreasing welfare). Although these results differ from the policy outcomes in the Craig and Richeson measure, they may lead to even greater shifts in policy preference due to the salience and informational simplicity of some of the items (e.g. welfare attitudes in Study 2 versus naturalization timeline in Study 1).

To estimate the average treatment effect for each policy index, I conducted a linear regression with robust standard errors with a binary treatment condition indicator, adjusting for education, age, gender, partisan identification (1 = *strong Democrat*, 5 = *strong Republican*), and ideology (1 = *very liberal*, 7 = *very conservative*).

Figure 2 shows the estimated average treatment effects of receiving the white threat condition. The average treatment effect for all policy positions is close to zero. In no case does the treatment have a substantively large or significant estimated effect on respondents' policy positions or vote intention.

Figure 1: Estimated ATEs for Study 1



Discussion

The results from the second study do not suggest a link between the racial shift condition and conservative policy preferences or vote intention. Although the treatment I utilized was shorter than the TESS experiment, it outright told whites that their loss of primacy would result in declining political and economic status.

Study 3: Strengthening the Treatment

In Study 3, I strengthened the racial shift cue even further, providing respondents with a video cue instead of a text-based cue. I conducted Study 3 on Amazon Mechanical Turk from November 7-9, 2021 to assess the impact of a strengthened version of the racial shift condition.

Method

I recruited 274 respondents from Amazon Mechanical Turk (MTurk) from November 7-9, 2021 to take part in a short survey (158 men, 135 women; mean age = 42.5, sd age = 12.7). Respondents were screened to include only white, non-Hispanic Americans. Respondents answered questions on their demographic characteristics and their white identity strength, then were randomly assigned to one of two conditions. Respondents in the racial shift condition watched a 1 minute and 10 second clip from a Reuters news segment, aired on August 21, 2021, stating that the proportion of whites in the United States was declining relative to the proportion of racial minorities. Respondents in the control condition did not

	Policy Preferences	Vote Intention
Intercept	-4.73^{***}	-0.39^{***}
	(0.67)	(0.08)
Received Treatment	-0.17	-0.06^{*}
	(0.27)	(0.03)
Education	0.04	0.00
	(0.10)	(0.01)
Age	-0.01	0.00
	(0.01)	(0.00)
Male	0.28	0.03
	(0.25)	(0.03)
PID (7-pt)	0.47^{***}	0.15^{***}
	(0.10)	(0.01)
Ideology (7-pt)	0.55^{***}	0.05^{***}
	(0.11)	(0.01)
R^2	0.46	0.80
Adj. R^2	0.45	0.80
Num. obs.	293	238

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 3: Estimating the Complier Average Causal Effect of the Racial Shift Treatment on Policy Preferences and Vote Intention

watch a video and proceeded directly to the following questions. The survey included a built-in timer equal to the length of the video to ensure that respondents did not advance without playing the video entirely.

At the end of the survey, respondents were asked about the content of the video. Eleven respondents in the treatment condition did not correctly answer a question about the video, while all participants in the control condition correctly reported that they did not watch a video. I assume that respondents that correctly identified the video content received the treatment, while those that incorrectly identified the video did not receive the treatment. To address the one-sided noncompliance, I estimated the Complier Average Causal Effect (CACE) as opposed to the Average Treatment Effect (ATE) among all respondents. To obtain the CACE, I conducted an instrumental variables regression with policy preferences or vote intent as the outcome measure, whether the respondent received the racial shift treatment as the main predictor, and treatment assignment as an instrument. I adjusted for age, education, gender, partisan self-identification (7-pt), and ideology (7-pt).

To assess the influence of the racial shift condition on policy preferences, respondents rated agreement with five policy positions: eliminating affirmative action, stronger immigration enforcement, increasing Social Security, decreasing welfare, and expanding Medicare. Respondents responded if they favored the position (-1 = *oppose*, 1 = *favor*). All policy positions were recoded such that positive values signified more conservative policy positions. Policy positions were scaled into an index by adding all items together. Respondents also answered a question about their vote intention for the 2024 presidential election (1 if Republican, 0 otherwise).

Regression results shown in Table 5 demonstrate that those assigned to the racial shift condition were no more conservative, on average, than those in the control condition. Respondents were slightly less

likely to report a Republican vote intention after exposure to the racial shift treatment.

Discussion

The results from Study 3 confirm the findings of previous studies: Exposure to a racial shift treatment did not lead to more conservative policy preferences or a greater Republican vote intention, even when the treatment was a more intense video threat. These effects were not moderated by pretreatment partisan identification.

Study 4: Do Population Threats Increase Racial Liberalism?

The previous three experiments show no significant link between information about whites' decreasing demographic primacy and increased racial or political conservatism. One potential explanation for this disconnect is that whites may be so racially liberal that they view the impending majority-minority status of the United States as a good thing. An examination of the mediators from Study 1 suggests that, in fact, whites exposed to the population threat treatment display reduced uncertainty regarding American society and a more positive outlook on the future of the United States. However, a competing explanation could be that although whites express more positive emotions in survey responses, their responses are not reflective of a true embrace of racially liberal principles. In other words, the evidence of increased positivity may be due to social desirability bias rather than a genuine response. To better understand whether these responses may be a manifestation of true underlying attitudes, I conducted a fourth study that included an Implicit Association Test measuring white identity.

Method

I recruited 822 non-Hispanic white participants from Prolific from February 8-11, 2022. Respondents were randomly shown either the population threat text treatment used in Study 3, or were not shown a treatment. Respondents then took the White Identity Centrality Implicit Association Test (WICIAT) derived from Knowles and Peng (2005). The WICIAT from Knowles and Peng (2005) is designed to test the difference between one's connection to the white racial ingroup versus connection to racial outgroups.

Respondents were asked to complete a set of matching tasks as quickly as possible. Respondents first completed two learning blocks. In the first learning block, respondents were asked to classify a list of names from Knowles and Peng (2005) as white or non-White names. In the second learning block, respondents categorized pronouns ('I','me', 'them') as relating to the self or other. Respondents then faced three more blocks. First, respondents had to categorize a mix of names and pronouns as White/self or non-White/other. Respondents then completed a round in which the White/self or non-White/other positions on the screen were switched. In the final round, respondents were presented with a set of 'incompatible' words (non-White/self and White/other) and were asked with matching the words to the correct category. In expectation, most whites will match compatible words (White/self and

	IAT Scores	Policy Preferences	Vote Intention
Intercept	0.23*	−0.14***	−0.39***
	(0.07)	(0.03))	(0.04)
Treatment	−0.01	−0.00	−0.01
	(0.03)	(0.01)	(0.02)
Education	−0.01	0.01**	0.01
	(0.01)	(0.01)	(0.01)
Age	0.01*	0.00	0.00
	(0.00)	(0.00)	(0.00)
Gender	−0.04	0.04***	−0.03
	(0.03)	(0.01)	(0.02)
PID (7-pt)	−0.01	0.02***	0.11***
	(0.01)	(0.01)	(0.01)
Ideology (7-pt)	0.02	0.09***	0.05***
	(0.01)	(0.01)	(0.01))
R^2	0.05	0.54	0.60
Adj. R^2	0.05	0.53	0.59
Num. obs.	777	791	797
RMSE	0.40	0.20	0.25

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 4: Effect of Population Threat Treatment on WICIAT Outcomes, Policy Preferences, and Vote Intention

non-White/other) more quickly than incompatible words (non-White/self and White/other). A greater timed discrepancy between compatible and incompatible matching tasks signifies greater ingroup bias. More information about the conduct of the WICIAT is found in Appendix E.

IAT scores are reported as D (Mean = 0.46, SD = 0.40), with higher scores indicating greater ingroup bias. I estimated the effect of the treatment on IAT scores by conducting a linear regression with robust standard errors, with D as the outcome measure and an indicator for the treatment as the independent variable. I adjusted for education, age, gender, partisanship, and ideology.

After completing the IAT, respondents answered the same questions regarding policy preferences that were asked in Studies 2 and 3. Respondents then provided their demographic characteristics and exited the survey.

Regression results in Table 4 show that there was no effect of the racial shift treatment on WICIAT scores. Additionally, there was no effect of the racial shift treatment on policy preferences or vote intention. All estimates are close to zero.

Discussion

The results from Study 4 suggest that there is no relationship between the racial shift treatment and political conservatism. Furthermore, exposure to the racial shift treatment was not associated with significantly different implicit racial attitudes.

Explaining the Group Threat-Conservatism Disconnect

Does learning about changing population demographics lead to more conservative political and racial preferences among white Americans? Across four original experiments, the results point to no. Study 1 tested a shortened version of the Craig and Richeson treatment that explicitly informed participants that changing population demographics would lead to decreased power. I did not find any effect of the treatment on policy preferences or stated vote intention. Study 2 performed an exact replication of the Craig and Richeson study. I did not find that the racial shift condition led to more conservative policy positions or racial attitudes. I found that while perceptions of group threat increased, participants also reported increased certainty about America's future and decreased perceptions of system threat. Study 3 intensified the Craig and Richeson treatment with a video cue instead of a text-based treatment. There was no effect of the racial shift video cue on conservative policy preferences or vote intention. Study 4 presented the text treatment from Study 2, but evaluated racial attitudes among respondents with an Implicit Association Test. Exposure to the racial shift treatment was not associated with significantly different implicit racial attitudes. All together, the results suggest that there is scant evidence for a link between racial threat cues and more conservative political or racial attitudes.

These findings are consistent with recent work that demonstrates limited evidence of the relationship between racial shift treatments and more conservative policy preferences. Following Brown et al. (2021), I did not find that the racial shift condition led to more conservative policy preferences, although both studies find increases in group status threat. Like Stewart and Willer (2021), I did not find that racial shift treatments led to more conservative vote intentions.

One explanation for the disconnect between racial shift treatments and conservatism is that there could have been a genuine shift in racial attitudes such that increased diversity is now seen as a net positive. There is some evidence that Americans have become more racially conscious over the past decade, particularly among liberals. Slightly over half of white liberals now say that whites have advantages that Black Americans do not have, up from 38 percent in 2016 (Center, 2021). The proportion of white Republicans who believe that a majority-minority country is 'bad for the country' has declined nearly 20 percentage points from 2016 to 2019 (Center, 2019). These results suggest that white Americans, both liberals and conservatives, are becoming more racially liberal.

This explanation is most compelling when taking the results for potential mediators at face value. While group threat perceptions increased, so did certainty about society's future and overall perceptions of American society. The item on group status threat asks respondents whether they think that changing demographics will result in the loss of power for white Americans. Previously, agreement with that statement was implicitly accepted to have negative associations for white Americans. Now, it appears that although whites agree with that statement, they do not view their statistical decline so negatively.

This explanation is satisfactory only if we take the results on potential mediators as genuine expressions of acceptance rather than as products of social desirability bias. Feeling thermometer results

Figure 2: Distribution of Feeling Thermometer Scores from Study 2

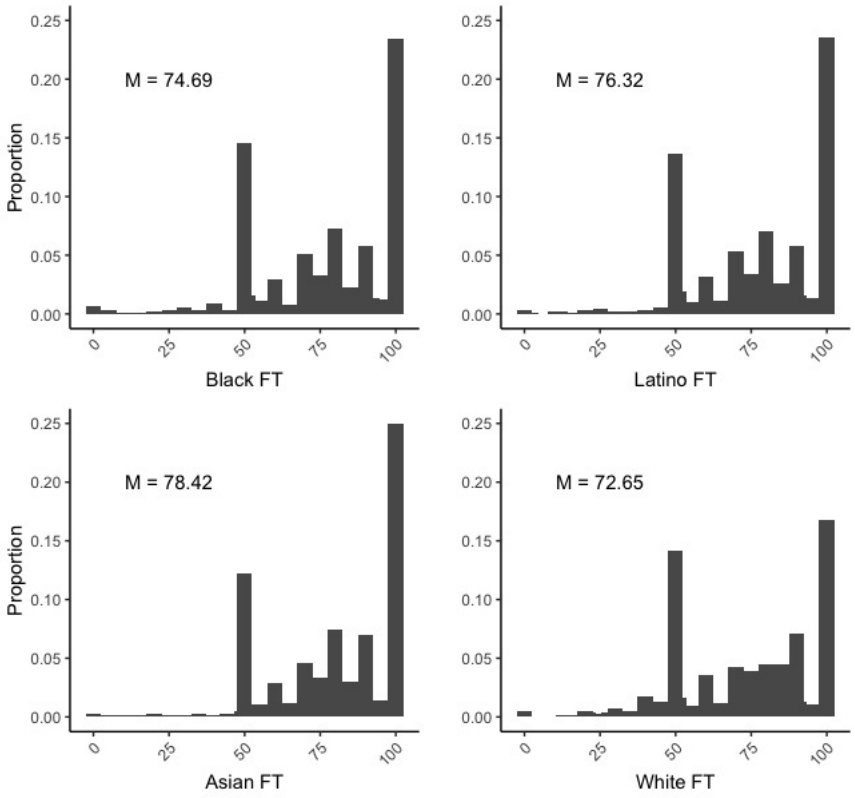
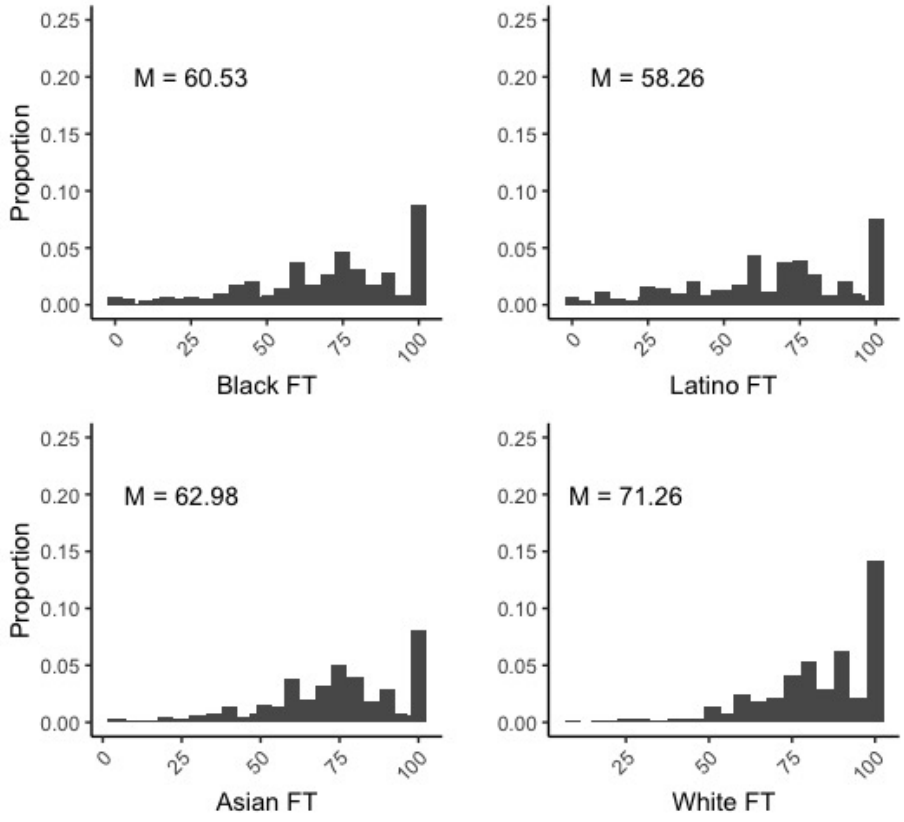


Figure 3: Distribution of Feeling Thermometer Scores from Original Craig and Richeson Data



demonstrate some peculiar response patterns that are inconsistent with behavioral data in the social science literature.

Figure 3 shows feeling thermometer data from Study 2. The mean feeling thermometer rating was similar across racial group and treatment conditions. Discrepancies across feeling thermometer ratings appear to be driven by whites' reticence to rate whites at a 100 on a 101-point feeling thermometer, while they are more willing to rate nonwhite outgroups at 100. Although the mean rating of whites is nearly identical from 2014 to 2021 ($M_{2014} = 71.26, M_{2021} = 72.65$), ratings of nonwhite groups have ballooned to the extent that ratings of any nonwhite group now exceed the mean rating of whites. These results appear to be driven by large proportions of whites rating nonwhites at 100 on a 101-point feeling thermometer and an avoidance of rating nonwhites at less than 50 on feeling thermometers. In 2014, rates of participants rating nonwhites below 50 ranged from 12 percent (Asian FT) to 22 percent (Latino FT). In 2021, the rate at which participants rated nonwhites below 50 was much lower, ranging from 4 percent (Asian FT) to 8 percent (Black FT). In comparison, while just 4 percent of white participants rated whites below a 50 in 2014, nearly 11 percent of respondents rated their own racial group below a 50 in 2021.

Other outcome measures display similar levels of racial liberalism in 2021: Just 16 percent of respondents across conditions disagree with the statement that they would feel comfortable in settings where there would be few people from their racial group, a response rate at odds with behavioral data regarding whites' well-documented propensity for self-segregation (Anicich et al., 2021). The proportion of whites saying that they would not be comfortable dropped by about 13 percentage points from the original Craig and Richeson data, when almost 29 percent of respondents said they wouldn't feel comfortable.

The results from Study 4 demonstrate that this professed racial liberalism from study participants is most likely due to social desirability bias, not a genuine change in racial attitudes. Importantly, the IAT from Study 4 measured implicit attitudes, that is, the attitudes captured are presumably not influenced by social desirability. Once that consideration was removed, it is evident that there is no significant shift in racial attitudes after exposure to the racial shift treatment.

A different explanation for the missing demographic change-conservatism link could be that the original effects are time-bound. The first wave of racial shift studies were conducted under the Obama administration, when the election of the nation's first Black president had profound political influence on the attitudes of white Americans, such as the formation of the Tea Party. Racially explicit rhetoric on both Obama's presidency and immigration policy was salient and highly visible. Optimistic observers may argue that a post-Trump presidency resulted in a lower influence of racially explicit rhetoric on white Americans. This explanation may explain why racial shift treatments appeared to work in 2018, but not in 2021 (Major et al., 2018). However, null replication of the 2018 results demonstrate that even in 2018, the results on threat and conservatism do not replicate consistently (Stewart & Willer, 2021).

An alternative extension of this theory is that the results are time-bound simply because the information that is introduced in the racial shift treatments is no longer new to most white Americans.

Brown et al. (2021) found that participants in their study already believed that the United States is a majority-minority nation. If most American whites already believe that they are in the minority, yet continue to observe that white Americans maintain their position on the top of the racial hierarchy, then they may believe that changing population demographics are a threat that is already diffused. A useful test of this theory could be carried out if researchers located a sample of whites unfamiliar with their declining status, however, finding such a set of whites may be difficult if this information is so diffuse.

Across four experiments, I found no evidence that there is a connection between information regarding demographic change and increases in political or racial conservatism. I find that it is unlikely that the results are due to increases in racial liberalism. Instead, the findings are likely a product of respondents' preexisting informational environments: If so many whites already believe that they are the demographic minority in the United States, the introduction of a racial shift cue, even a strengthened video treatment, would not greatly move attitudes.

Conclusion

The demographic composition of the United States has drastically shifted in the past half-century due to immigration and birth rate trends. Many political observers directly attribute those changes to a conservative shift in the American political environment, such as the formation of the Tea Party and the political ascent of Donald Trump. Yet, I demonstrate across four experiments that exposing whites to information about shifting racial demographics in the United States does not lead to more conservative political or racial attitudes. Furthermore, I find that there is a disconnect between professed and implicit racial attitudes: Although respondents display signs of heightened racial liberalism, their implicit racial attitudes do not change upon exposure to racial threat treatments. This disparity points to a potential shortcoming in the measures that are currently used to evaluate racial attitudes.

References

Anicich, E. M., Jachimowicz, J. M., Osborne, M. R. & Phillips, L. T. (2021). Structuring Local Environments to Avoid Racial Diversity: Anxiety Drives Whites' Geographical and Institutional Self-Segregation Preferences. *Journal of Experimental Social Psychology*, *95*, 104–117.

Bai, H. & Federico, C. M. (2020). White and minority demographic shifts, intergroup threat, and right-wing extremism. *Journal of Experimental Social Psychology*, *94*, 104114. https://doi.org/10.1016/j.jesp.2021.104114

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

Bobo, L. & Hutchings, V. L. (1996). Perceptions of Racial Group Competition: Extending Blumer's Theory of Group Position to a Multiracial Social Context. *American Sociological Review*, *61*(6), 951–972.

Bobo, L. D. (1999). Prejudice as Group Position: Microfoundations of a Sociological Approach to Racism and Race Relations. *Journal of Social Issues*, *55*(3), 445–472.

Brown, X., Rucker, J. M. & Richeson, J. A. (2021). Political ideology moderates White Americans' reactions to racial demographic change. *Group Processes & Intergroup Relations*, 1–19.

Carpenter, T., Pogacar, R., Pullig, C., Kouril, M., Aguilar, S., LaBouff, J., Isenberg, N. & Chakroff, A. (2022). Survey-software Implicit Association Tests: A methodological and empirical analysis. *Behavior Research Methods*.

Carter, N. M. & Pérez, E. O. (2016). Race and Nation: How Racial Hierarchy Shapes National Attachments. *Political Psychology*, *37*(4), 497–513.

Center, P. R. (2019). *Views on Race and Immigration* (tech. rep.). Pew Research Center.

Center, P. R. (2021). *Deep Divisions in Americans' Views of Nation's Racial History- and How to Address It* (tech. rep.). Pew Research Center.

Craig, M. A. & Richeson, J. A. (2014a). More Diverse Yet Less Tolerant? How the Increasingly Diverse Racial Landscape Affects White Americans' Racial Attitudes. *Personality and Social Psychology Bulletin*, *40*(6), 750–761.

Craig, M. A. & Richeson, J. A. (2014b). On the Precipice of a "Majority-Minority" America: Perceived Status Threat From the Racial Demographic Shift Affects White Americans' Political Ideology. *Psychological Science*, *25*(6), 1189–1197.

Craig, M. A., Rucker, J. M. & Richeson, J. A. (2018). Racial and Political Dynamics of an Approaching "Majority-Minority" United States. *The ANNALS of the American Academy of Political and Social Science*, *677*(1), 204–214.

Greenwald, A. G., Nosek, B. A. & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, *85*(2), 197–216.

Jardina, A. (2019). *White identity politics*. New York, NY, USA : Cambridge University Press.

Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P. & Ostafin, B. (2007). Are Needs to Manage Uncertainty and Threat Associated With Political Conservatism or Ideological Extremity? *Personality and Social Psychology Bulletin*, *33*(7), 989–1007.

Kay, A. C. & Jost, J. T. (2003). Complementary Justice: Effects of 'Poor but Happy' and 'Poor but Honest' Stereotype Exemplars on System Justification and Implicit Activation of the Justice Motive. *Journal of Personality and Social Psychology*, *85*(5), 823.

Knowles, E. D. & Peng, K. (2005). White Selves: Conceptualizing and Measuring a Dominant-Group Identity. *Journal of Personality and Social Psychology*, *89*(2), 223.

Lowery, B. S., Unzueta, M. M., Knowles, E. D. & Goff, P. A. (2006). Concern for the in-group and opposition to affirmative action. *Journal of Personality and Social Psychology*, *90*(6), 961–974.

Major, B., Blodorn, A. & Major Blascovich, G. (2018). The threat of increasing diversity: Why many White Americans support Trump in the 2016 presidential election. *Group Processes & Intergroup Relations*, *21*(6), 931–940.

Mutz, D. C. (2018). Status threat, not economic hardship, explains the 2016 presidential vote. *Proceedings of the National Academy of Sciences*, *115*(19).

O'Connell, N. S., Dai, L., Jiang, Y., Speiser, J. L., Ward, R., Wei, W., Carroll, R. & Gebregziabher, M. (2017). Methods for Analysis of Pre-Post Data in Clinical Research: A Comparison of Five Common Methods. *Journal of biometrics & biostatistics*, *8*(1), 1–8.

Outten, H. R., Schmitt, M. T., Miller, D. A. & Garcia, A. L. (2012). Feeling Threatened About the Future: Whites' Emotional Reactions to Anticipated Ethnic Demographic Changes. *Personality and Social Psychology Bulletin*, *38*(1), 14–25.

Schildkraut, D. J. & Marotta, S. A. (2018). Assessing the Political Distinctiveness of White Millennials: How Race and Generation Shape Racial and Political Attitudes in a Changing America. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *4*(5), 158–187.

Schnabel, K., Asendorpf, J. B. & Greenwald, A. G. (2008). Assessment of Individual Differences in Implicit Cognition. *European Journal of Psychological Assessment*, *24*(4), 210–217.

Stewart, S. & Willer, R. (2021). The effects of racial status threat on White Americans' support for Donald Trump: Results of five experimental tests. *Group Processes & Intergroup Relations*, 1–20.

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

1 Appendix

Appendix A.

["h"] height

	Affirmative Action	Immigration Enforcement	Decrease Welfare	Increase SS	Expand Medicare	Nonracial Policies	Racial Policies	All Policies
Intercept	1.45***	1.22***	1.03***	0.82***	0.47**	1.29***	3.74***	0.96***
	(0.22)	(0.19)	(0.20)	(0.17)	(0.16)	(0.28)	(0.43)	(0.11)
Treatment	−0.05	0.10	−0.05	0.03	0.08	0.12	0.06	0.01
	(0.08)	(0.07)	(0.08)	(0.07)	(0.07)	(0.12)	(0.17)	(0.05)
Education	0.01	−0.03	0.00	0.09***	0.04	0.12**	−0.01	0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.04)	(0.06)	(0.02)
Age	−0.00	0.01*	−0.00	−0.01	0.00	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Male	0.13	−0.07	−0.10	0.24***	0.09	0.30*	−0.03	0.06
	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.12)	(0.17)	(0.05)
PID	0.12***	0.15***	0.12**	0.02	0.08*	0.10	0.38***	0.10***
	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.07)	(0.08)	(0.02)
Ideology	0.10**	0.12***	0.14***	0.09**	0.12***	0.22***	0.36***	0.11***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.06)	(0.07)	(0.02)
R^2	0.20	0.32	0.29	0.15	0.23	0.23	0.40	0.41
Adj. R^2	0.18	0.30	0.28	0.13	0.22	0.21	0.38	0.40
Statistic	13.91	37.06	24.90	11.32	17.72	17.15	37.87	39.33
P Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DF Resid.	334.00	345.00	347.00	346.00	345.00	339.00	327.00	353.00
nobs	341	352	354	353	352	346	334	360

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Appendix B.

	Group Threat	System Threat	Uncertainty
c	1.80	1.80	1.80
	(1.45)	(1.45)	(1.45)
c'	1.93	1.35	1.71
	(1.45)	(1.45)	(1.45)
ab	−0.12	0.46	0.10
	(0.14)	(0.25)	(0.14)

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$. c is total effect of threat on conservatism. c' is direct effect of treatment on conservatism. ab is indirect effect of treatment through mediator.

Table 5: Mediation Coefficients for Black FT

	Group Threat	System Threat	Uncertainty
c	2.19	2.19	2.19
	(1.37)	(1.37)	(1.37)
c'	2.27	1.90	2.10
	(1.37)	(1.37)	(1.37)
ab	−0.08	0.29	0.10
	(0.14)	(0.22)	(0.13)

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$. c is total effect of threat on conservatism. c' is direct effect of treatment on conservatism. ab is indirect effect of treatment through mediator.

Table 6: Mediation Coefficients for Latino FT

	Group Threat	System Threat	Uncertainty
c	2.96	2.96	2.96
	(1.31)*	(1.31)*	(1.31)*
c'	2.95	2.68	2.92
	(1.31)*	(1.31)*	(1.31)*
ab	0.01	0.28	0.03
	(0.12)	(0.21)	(0.11)

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$. c is total effect of threat on conservatism. c' is direct effect of treatment on conservatism. ab is indirect effect of treatment through mediator.

Table 7: Mediation Coefficients for Asian FT

	Group Threat	System Threat	Uncertainty
c	0.97	0.97	0.97
	(1.40)	(1.40)	(1.40)
c'	1.08	1.03	0.79
	(1.40)	(1.40)	(1.40)
ab	−0.11	−0.05	0.18
	(0.14)	(0.18)	(0.15)

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$. c is total effect of threat on conservatism. c' is direct effect of treatment on conservatism. ab is indirect effect of treatment through mediator.

Table 8: Mediation Coefficients for White FT

Appendix C.

Study 1 Treatment:

New U.S. Census Bureau data suggest that America will become a "majority-minority" nation much faster than once predicted. The nation's racial minority population is steadily rising, advancing an unmistakable trend that could make minorities the new American majority by midcentury. The data show a declining number of White adults and growing under-18 populations of Hispanics, Asians, and other minorities. Demographers calculate that by 2042, Americans who identify themselves as Hispanic, Black, Asian, American Indian, Native Hawaiian, or Pacific Islander will together outnumber non-Hispanic Whites. The main reasons for the accelerating change are rapid immigration growth and significantly higher birthrates among racial and ethnic minorities. As White baby boomers age past their childbearing years, younger Hispanic parents are having children – and driving U.S. population growth. For example, there are now roughly 9 births for every 1 death among Hispanics, compared to a roughly one-to-one ratio for Whites. The latest figures are predicated on current and historical trends, which can be thrown awry by several variables, including prospective overhauls of public policy.

Study 2 Treatment:

Over the years, there has been a great deal of conflict over white Americans' role in American society. Some argue that white people are under threat due to changing racial demographics in the United States. Census projections show that whites will be the minority in the United States by 2045. Some argue that this demographic change will result in fewer jobs and less political representation for white Americans.

Study 3 Treatment:

HTML code was altered such that respondents only viewed seconds 0 through 69 of the video: https://www.youtube.com/embed/0p$_Q wZXg - Ko?controls = 0; end = 69$

Appendix D.

I replicated Craig and Richeson's findings using the original data from TESS. To assess the influence of racial shifts on conservative ideology, measured by policy preferences, the authors evaluated political ideology through five policy measures: The timeframe for immigrant naturalization, whether the number of immigrants should be reduced, support for affirmative action, support for universal healthcare, and

support for military spending. The authors conducted a 2 x 2 analysis of covariance (ANCOVA), with treatment condition as a between-subjects factor and type of policy (racial or nonracial) as a within-subjects factor. The authors found a main effect of treatment condition on racial policy issues as well as race-neutral policy issues.

To assess the influence of racial shifts on racial attitudes, participants were asked to rate whites, Blacks, Asians, and Latinos on a set of four feeling thermometers. The authors conducted a 4 x 2 ANCOVA, with racial target group as a within-subjects factor and treatment condition as a between-subjects factor. They found a main effect of experimental condition on negative attitudes, and while there was an unreliable target group by treatment interaction, they found that participants in the racial shift group reported more negative attitudes towards Blacks, Latinos, and Asians. Attitudes towards whites remained unchanged.

To assess the relationship between racial shift information and political conservatism, I conducted a multilevel model with policy type (racial or nonracial) as the within-subjects factor and treatment as the between-subjects factor. In line with the original analysis, I included both white and nonwhite participants, but attached negligible weights (0.0001) to nonwhite participants to ensure accurate calculation of standard error in subsample analyses. This process is equivalent to excluding nonwhites, although the authors note that this procedure is utilized to correct for concerns regarding accurate estimation of standard errors for subpopulations. All models include adjustment for demographic characteristics measured prior to treatment. Although the models differ slightly in assumptions, both ANCOVA and linear mixed models produce unbiased estimates of treatment effects (O'Connell et al., 2017). Furthermore, the linear mixed model is superior in this case as ANCOVA requires listwise deletion of observations with missing data, leading to significant loss of power. Up to 50 observations contained missing data on the Latino feeling thermometer measure alone. As Craig and Richeson did not specify multiple imputation to address missing data, I assume that listwise deletion occurred during model estimation.

Craig and Richeson report a main effect of treatment condition ($F(1, 464) = 5.84$, $p = 0.016$), but no other interaction between treatment condition and policy type. I confirm a marginal effect of treatment ($F(1, 1192) = 3.7$, $p = 0.054$) and no interaction between policy type and treatment condition ($F(1, 1192) = 0.31$, $p = 0.58$). Participants assigned to the racial shift condition reported more conservative policy attitudes on both types of policies, but did not become more conservative on racial policies relative to nonracial policies.

Table 1 displays the results of the re-estimated feeling thermometer model in linear mixed model form. Craig and Richeson estimate a main effect of target group ($F(2, 1098) = 110.82$, $p < 0.001$). Although they report a weakly significant interaction between target group and treatment ($F(3, 1098) = 2.07$, $p = 0.102$), they note that there are significant interactions between treatment condition and ratings of Black people ($F(1,376) = 4.95$, $p = 0.027$), Latinos ($F(1, 374) = 4.30$, $p = 0.039$), and Asians ($F(1,373) = 9.27$, $p = 0.003$). The replication confirms a main effect of target group: Nonwhite groups were rated more negatively than whites on average. However, there was no main effect of treatment.

	Feeling Thermometer	Policy Preferences
Intercept	61.28***	0.08
	(5.77)	(0.14)
Treatment	−0.06	−0.09
	(1.90)	(0.05)
Asian FT	−7.84***	
	(1.27)	
Black FT	−12.83***	
	(1.28)	
Latino FT	−15.07***	
	(1.27)	
Age	0.05	−0.00
	(0.05)	(0.00)
Education	3.34***	0.02
	(0.81)	(0.02)
Male	−0.74	−0.03
	(1.56)	(0.04)
PID (7-pt)	0.51	0.05***
	(0.50)	(0.01)
Ideology (7-pt)	−0.48	−0.08***
	(0.67)	(0.02)
Treatment * Asian FT	−4.45*	
	(1.79)	
Treatment * Black FT	−2.57	
	(1.79)	
Treatment * Latino FT	−2.72	
	(1.79)	
Nonracial Policies		0.08
		(0.05)
Treatment * Nonracial Policies		0.04
		(0.07)
AIC	15355.93	4703.47
BIC	15438.44	4759.47
Log Likelihood	−7662.97	−2340.73
Num. obs.	1809	1201
Num. groups: CaseID	458	611
Var: CaseID (Intercept)	229.76	0.00
Var: Residual	180.79	0.31

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 9: Influence of Racial Shift Condition on Feeling Thermometer and Policy Preference Outcomes in Original Data

There was no interaction between treatment and feeling thermometer ratings, with the exception of the Asian feeling thermometer. Respondents who received the racial shift treatment felt more negatively about Asians relative to whites by about 4.5 points on a 101-point feeling thermometer.

More importantly than differences in estimation, previously unreported outcomes in the Craig and Richeson data complicate our understanding of these results. Two unreported measures captured racial attitudes. Respondents were asked to agree with two statements: 'I would be completely comfortable in a social setting where there were very few people from my racial/ethnic group', and 'I would prefer to live in a neighborhood with people of my same racial/ethnic origin' (1 = *strongly agree*, 7 = *strongly disagree*. Respondents also answered a post-treatment measure of self-reported ideological placement on a 7-point scale (1 = *very liberal*, 7 = *very conservative*).

	Comfort Around Other Races	Prefer White Neighbors	Post-Treatment Ideology
Intercept	4.00^{***}	3.20^{***}	0.35
	(0.52)	(0.48)	(0.18)
Treatment	0.03	−0.06	0.01
	(0.14)	(0.12)	(0.05)
PID	−0.07	0.04	-0.04^{*}
	(0.05)	(0.04)	(0.02)
Ideology	0.05	-0.15^{**}	0.92^{***}
	(0.06)	(0.06)	(0.03)
Age	0.01	0.00	0.00
	(0.00)	(0.00)	(0.00)
Education	-0.20^{*}	0.24^{**}	−0.02
	(0.08)	(0.07)	(0.03)
Income	−0.01	−0.01	0.00
	(0.02)	(0.02)	(0.01)
Male	0.07	0.00	0.09^{*}
	(0.14)	(0.12)	(0.04)
R^2	0.05	0.08	0.90
Adj. R^2	0.03	0.06	0.90
Statistic	3.68	5.21	978.98
P Value	0.00	0.00	0.00
DF Resid.	451.00	455.00	456.00
nobs	459	463	464

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 10: Effect of Treatment on Unreported Outcome Measures in Original Experiment

As seen in Table 2, there are null effects for all three variables, with estimated average treatment effects close to zero. The results of this table conflict with previous findings on the relationship between status threat, racial conservatism, and outgroup attitudes. While previous analyses demonstrate that status threat influences policy attitudes, they do not influence self-reported ideological placement post-treatment. And while the statistical significance of the relationship between treatment and outgroup attitudes may fluctuate, depending on the estimation strategy, there is no evidence that status threats influence more general comfort around nonwhites and preference for coracial neighbors. These mixed results run counter to the claim that racial shifts lead to more conservative racial and political attitudes.

Appendix E.

The IAT was created in Qualtrics using the IATGen software (Carpenter et al., 2022). Respondents were presented with a total of 140 trials across five blocks. One set of word matching is equivalent to one trial. Responses were penalized for inaccurate timing in the guidelines set by Carpenter et al. (2022). Responses were dropped if respondents did not respond quickly enough (i.e. respondents matched the words in over 10,000 milliseconds), as recommended by Greenwald et al. (2003). Approximately 0.03 percent of all trials were dropped due to timing out. Respondents were considered 'speeders' and all of their trials were dropped if they completed more than 10 percent of their trials in under 300 milliseconds. Approximately 2.7 percent of all samples were dropped due to this penalty. Finally, responses were penalized by 600 seconds if the matching task was completed incorrectly. The error rate was approximately 7.9 percent of all responses, which is expected for an IAT.

One way to obtain the reliability of the IAT is taking the differences of the first, second, and third trials and using the differences scores in Cronbach's alpha (Schnabel et al., 2008). Using this method, I calculated a Cronbach's alpha of 0.865.

I conducted a t-test to ensure that the IAT scores are significantly different from 0, that is, that there is evidence of ingroup bias in the sample. The results from the t-test suggest that there was significant ingroup bias among respondents (t = 38.344, DF = 1213, p ¡ 0.001). The Cohen's D of the sample is 1.10.