ORIGINAL ARTICLE



Effects of race and political identity on interpersonal cooperation: A secondary analysis and replication

Kevin J. Willcox¹ | Hirotaka Imada² | Ann C. Rumble³ | Dejah Yansen⁴ | Marilynn B. Brewer ©⁵

Correspondence

Marilynn B. Brewer, Department of Psychology, Ohio State University, Columbus, OH, USA. Email: brewer.64@osu.edu

Abstract

The highly polarized nature of American politics today has been attributed, in part, to the power of partisanship as a social identity and the increasing alignment of party affiliation, political ideology, and other social identities. The overlap between political and racial identities in particular has been given much attention. The current report compares results from two cross-categorization studies designed to (a) examine the relative weight of race and political identity in cooperative decision-making and (b) to explore individual differences in pattern of response as a function of participant's own race and political ideology. Study 1 was a re-analysis of data reported in an earlier research article by Ugular and colleagues (2023, Experiment 2) and Study 2 was a conceptual replication with some modifications. Results from both studies revealed significant interactions between participant identities and partner characteristics such that the relative effects of partner race and partner political ideology on cooperative behavior differed as a function of the combined racial (Black or White) and political (liberal or conservative) identity of the respondent. Similarities and differences in the pattern of results between the two studies are discussed in terms of their implications for our understanding of political polarization.

INTRODUCTION

The highly polarized nature of American politics today has been attributed, in part, to the power of partisanship as a social identity (Iyengar et al., 2012, 2019; Mason, 2018; Van Bavel & Pereira, 2018). From the social identity perspective, shared political affiliation elicits ingroup favoritism and corresponding antipathy to political outgroups, which at its extreme is characterized by active distrust and rejection of anyone who belongs to the outgroup. An

© 2025 International Society of Political Psychology.

¹Department of Psychology, Durham University, Durham, UK

²Department of Psychology, Royal Holloway, University of London, Egham, UK

³Department of Psychology, Northern Arizona University, Flagstaff, Arizona, USA

⁴School of Social Science, Policy, and Evaluation, Claremont Graduate University, Claremont, California, USA

⁵Department of Psychology, Ohio State University, Columbus, Ohio, USA

ingroup—outgroup distinction is strengthened when multiple bases for shared identity are aligned (Crisp & Hewstone, 2007). Some political psychologists have argued that affective polarization along political divides is driven, in part, by the increasing alignment (sorting) of party affiliation (Republican—Democrat), political ideology (conservative—liberal), and other social identities (particularly, race and religion) (Finkel et al., 2020; Levendusky, 2009; Margolis, 2018; Mason, 2018). The alignment thesis is supported by evidence that when partisan identity is aligned with other social identities, affective discrimination and affective reactions to political party threat are amplified compared with conditions where politics cross-cut other social identities (Mason, 2015, 2016; Mason & Wronski, 2018; Robison & Moskowitz, 2019). A recent study by Egan (2020) using panel data found that some Americans even shift their ethnic, religious, or class identities over time to bring them in alignment with their politics.

There is evidence that the overlap between race and political party identity in the United States is particularly strong (Westwood & Peterson, 2022; Zhirkov & Valentino, 2022). Westwood and Peterson (2022) posit that the association between partisanship and race is so deep that activating one identity also activates the other. Results of experiments testing this association revealed that a positive experience with a Black partner in a behavioral game generalized not only to affect toward the racial outgroup but also to attitudes toward the associated outgroup political party. Conversely, experiences with a political outgroup member were also found to influence associated racial attitudes (Westwood & Peterson, 2022).

The perceived association between race and partisanship is most likely greater than the actual extent of overlap between these social categories. While it is true that the proportion of Democrats who are Black has increased significantly over time (Zhirkov & Valentino, 2022), it is still the case that more Democrats are White because of their numerical majority. Further, not all Black Democrats are also ideologically liberal; many identify as socially conservative (Dunn, 2020). Thus, the alignment of race, partisan identity, and political ideology is far from perfect, and these social groupings may represent cross-cutting categories in the population at large.

The cross-categorization paradigm

The perceived convergence of race and politics (both party and ideology) raises the question of how politically identified individuals respond to another individual who shares their political identity but not their racial identity. There is a relatively large literature on the effects of cross-categorization—how individuals evaluate and behave toward others who are described in terms of two (or more) social categories. In the case of two crossed categories, the perceiver may share both category memberships with the other person (double ingroup, I_1I_2), may share membership on one of the category dimensions but not the other (partial ingroup, I_1O_2 or O_1I_2), or the other person may have outgroup membership on both categories (double outgroup, O_1O_2) (see Hewstone et al., 1993; Mullen et al., 2001 for reviews).

Research on cross-categorization effects has identified several different patterns for how individuals combine category information in their responses to other individuals (see Urban & Miller, 1998). The most common pattern is an *additive* one where double ingroup members are evaluated most positively, followed by partial ingroup members, and double outgroup members least positively. If the two categories are equally weighted, this pattern is depicted as $I_1I_2 > I_1O_2 = O_1I_2 > O_1O_2$. However, if one category is weighted as more important than the other, the partial ingroups may be differentially evaluated $(I_1I_2 > I_1O_2 > O_1I_2 > O_1O_2)$. The most extreme form of weighting is represented by the *dominance* pattern, where shared membership on one of the categories is all that matters, and the second category is ignored $(I_1I_2 = I_1O_2 > O_1I_2 = O_1O_2)$.

One final pattern of interest is *exclusivity*, where only those who have both category memberships in common with the perceiver are regarded as true ingroup members, and partial ingroup members are evaluated the same as those who have double outgroup membership $(I_1I_2>I_1O_2=O_1I_2=O_1O_2)$. This is the pattern of social identification that Roccas and Brewer (2002) define as the *intersection* between two ingroup memberships and indicates that the two categories are highly aligned (i.e., overlapping) in the perceiver's mind.

Given these alternative patterns, what might we expect when there is a perceived correlation between two categories in the population at large? The answer may depend on whether the perceiver's own category memberships are congruent or incongruent with the expected correlation. For instance, White Republicans/Conservatives and Black Democrats/Liberals might be expected to exhibit the highest differentiation between the double ingroup and the double outgroup because of the convergent categorization, with responses to the partial ingroups moderated by the relative importance of race or political ideology to their own identity. On the other hand, White Democrats/Liberals may be expected to show little if any racial ingroup bias in their evaluation of cross-category members because the outgroup race is closely associated with the political ingroup. Finally, it is an open question how Black Republicans/ Conservatives might classify cross-category members, perhaps depending on whether race or political identity is dominant in their own ingroup identification.

These speculations about potential differences in response to others as a function of race and political identity indicate that the question of how the perceiver's own racial and political identities moderate classification of multiply categorized others as ingroup or outgroup members merits further exploration.

Categorization and cooperation

Much of the research on cross-categorization focuses solely on how multiply categorized individuals are *evaluated* as a function of their category memberships. Typical dependent measures involve rating the individual on evaluative traits or asking how much the respondent would expect to like this individual. Beyond evaluative judgments, however, defining another person as an ingroup member has powerful implications for *behavior* toward that person, particularly for interactions involving trust and cooperation (Yamagishi et al., 1999). In the literature on social dilemmas and economic games, *ingroup favoritism* (differential cooperation with those who share ingroup membership compared with others who are not in the ingroup) has been found across a wide range of social categories (Balliet et al., 2014). Economic games have also been used to assess ingroup bias based on political identity to determine the extent to which partisans are willing to endow or withhold financial rewards from other players who do or do not share their political identity (e.g., Balliet et al., 2018; Carlin & Love, 2013; Fowler & Kam, 2007; Iyengar & Westwood, 2015; Rand et al., 2009). Results of these studies demonstrate that political identity influences behavior toward others even in nonpolitical contexts.

As with most studies of ingroup favoritism, these experiments on the effects of political identity on ingroup favoritism in experimental games describe other players in terms of a single social category membership (e.g., Republican versus Democrat). This leaves the question of how much political partisanship or ideology matters if information about political identity is combined with information about another significant social category. One exception is a study by Iyengar and Westwood (2015, Study 3) that compared the relative influence of racial cues and political party affiliation of the partner on decision-making in two experimental games (a trust game or a dictator game). Results indicated that shared political identity had a strong effect on allocation decisions in both games; participants were both more generous and more trusting toward partners who shared their political partisanship than those who were identified as outgroup party members. However, the racial identity of the partner had no

significant effect; allocations to racially similar and racially different partners did not differ, and a partner who shared both party and racial identity did not elicit more allocation than one who shared political identity only. The authors concluded from these findings that social norms may suppress racial discrimination in a decision-making context, but discrimination based on partisan affiliation is uninhibited.

One issue with the Iyengar and Westwood study is that a sampling strategy was used to ensure that an equal number of Republicans and Democrats participated in the experiment, but there was no oversampling of Black respondents. Thus, the results regarding racial bias may reflect the relative influence of political identity and race on White decision makers predominantly. The questions we are raising require a full design where both race and political identity of the partner are fully crossed.

One study of race and politics cross-categorization effects that did sample both White and Black liberals and conservatives was recently published by Ugurlar et al. (2023, Experiment 2). Their experiment crossed race and political ideology of a player's partners and found evidence of an additive effect on contributions in a Prisoner's Dilemma (PD) game. However, in their analysis of the data, contributions for the two forms of partial ingroups ($I_{race}O_{political}$ and $I_{political}O_{race}$) were averaged together, so it was not possible to determine whether there was some pattern of dominance or differential weighting of the two categories. In addition, the researchers did not look at effects of the participant's own political and racial identity on the pattern of responses.

The study by Ugurlar et al. then provided a backdrop for our own study that was designed to systematically examine the relative weight of race and political identity in cooperative decision-making and to explore individual differences in patterns of response to crossed categories as a function of participants' own race and political ideology. Although we are aware that there is a rich literature in the study of US politics that distinguishes partisan identity (party affiliation) and political ideology (e.g., Kinder & Kalmoe, 2017), research on polarization suggests that currently ideology is both aligned with party membership and serves as a cue to party affiliation (e.g., Houston, 2024; Levendusky, 2009). Thus, self-categorization as liberal or conservative is treated as a political identity in both studies reported here.

STUDY 1: A SECONDARY ANALYSIS

At the time the Ugurlar et al. research was published, our own study, with a very similar design, had already been conducted. However, since their approach to the data was very different from our intended analyses, we were able to use their publicly available data set to conduct a secondary analysis of the data from their Experiment 2 that would examine the outcomes for the two partial ingroup combinations separately. The results of that reanalysis are reported here as a preliminary to the description and results of our own later experiment.

Method

A full description of the methodology is available in the original publication (Ugurlar et al., 2023, Experiment 2) so only a brief overview will be provided here. Our analysis code and their data can be found at https://osf.io/d4ksr/.

Participants

The study was conducted online in September 2020 using Prolific prescreening tools to recruit participants belonging to the four demographic groups of interest. The final sample (N=459) consisted of 143 White liberals, 136 Black liberals, 132 White conservatives, and 48 Black conservatives.

Procedure

Participants played a series of one-shot incentivized PD games with four interaction partners identified as White conservative, Black conservative, White liberal, or Black liberal (order counterbalanced). In each trial, participants decided how much of an initial endowment of \$.50 to transfer to the partner, which would then be doubled in value. This decision was made without knowing how much the partner was transferring simultaneously to the participant. With this task structure, the decision to contribute some or all of one's points on any trial is an indication of cooperative trust (reciprocal contributions would increase both players' outcomes) and/or altruistic generosity (willingness to benefit the other player regardless of their decision). Thus, the amount contributed can be assumed to reflect the degree of positive or prosocial orientation toward the partner.

Results

The dependent variable—amount of money transferred on each trial of the PD game—was subjected to a analysis of variance with race and political identity of the participant as a between-subjects factor and race and political identity of partner as a within-subjects factor. The within-subject factor was recoded in terms of match to the participant's own political and race identities, so that the design was a 2 (participant race: Black or White)×2 (partner politics: ingroup or outgroup) ×2 (partner politics: ingroup or outgroup) mixed ANOVA. The full ANOVA table is reported in Supplement A. Importantly, the results revealed two significant three-way interaction effects: a respondent race×respondent political identity×target race interaction, F(1, 455)=8.56, p=.004, and a respondent political identity×target race×target politics interaction, F(1,455)=5.01, p=.011. These interactions confirm our expectation that patterns of response to the cross-categorized partners would differ as a function of the participant's own race and political identity.

To fully understand the nature of these participant × partner interactions, the data were broken down by participant race and ideology, and the effects of partner characteristics were analyzed separately for each category. Mean contributions to partners based on race and political ideology are reported in Figure 1. (Tables with exact mean and standard error values are included in Supplementary Materials.)

Mean amounts given to partners by White liberals are presented in Figure 1A. For participants in this demographic group, partner political identity had a significant main effect on giving ($M_{\rm ingroup} = 37.38$, $M_{\rm outgroup} = 25.92$, F(1, 142) = 71.58, p < .001, partial eta squared = .33), and partner race had a smaller but significant main effect as well ($M_{\rm ingroup} = 30.68$, $M_{\rm outgroup} = 32.62$, F(1, 142) = 10.15, p = .002, partial eta squared = .07). The race effect for White liberals was in the direction of preference for outgroup over ingroup members. Additionally, there was a significant interaction effect (F(1, 142) = 8.18, p = .005, partial eta squared = .05). Whereas the racial outgroup was treated similarly to the racial ingroup for liberal partners, Black conservatives were treated more generously than White conservatives. As a consequence, the double outgroup was treated more positively than the White political outgroup (t(142) = -3.74, p = .001).

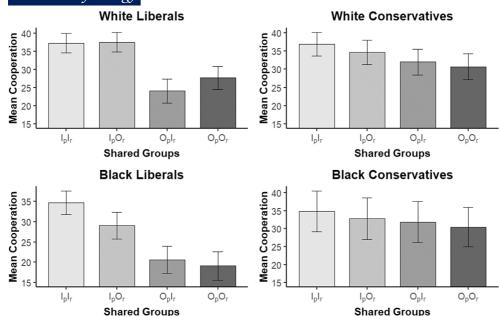


FIGURE 1 Mean contributions by each subgroup: Study 1. Bars indicate the .95 confidence interval.

Mean contributions for White conservatives are presented in Figure 1B. Again, there was a significant effect of partner political identity ($M_{\rm ingroup} = 35.77$, $M_{\rm outgroup} = 31.37$, F(1,131) = 15.43, p < .001, partial eta squared = .11) and a smaller significant effect of race ($M_{\rm ingroup} = 34.46$, $M_{\rm outgroup} = 32.68$, F(1,131) = 5.30, p < .02, partial eta squared = .04). In this case, the race effect was in the direction of ingroup favoritism, and the two effects were additive with no significant interaction. As expected, the biggest difference in means for this group was between the double ingroup and the double outgroup (t(131) = 4.65, p < .001).

Mean results for Black liberals are reported in Figure 1C. For this group as well, the effect of partner political identity was the dominant factor and highly significant ($M_{\rm ingroup} = 31.90$, $M_{\rm outgroup} = 19.91$, F(1,135) = 82.97, p < .001, partial eta squared = .38). There was also an ingroup favoritism effect of partner race ($M_{\rm ingroup} = 27.67$, $M_{\rm outgroup} = 24.24$, F(1,135) = 15.79, p < .001, partial eta squared = .10) moderated by a significant interaction (F(1,135) = 11.82, p < .001, partial eta squared = .08). Racial ingroup membership made no difference when the partner identified as a political outgroup member—Black conservatives were treated just as negatively as White conservatives (t(135) = 1.37, p = .52). For the political ingroup, however, Black partners were treated more favorably than White partners (t(135) = 9.70, p < .001).

Finally, the mean contributions given by Black conservatives are presented in Figure 1D. Although the results are consistent with an additive pattern, the mean differences are small and neither of the main effects nor interactions were statistically significant, in part because of the small sample size of this group.

Overall, then, with the exception of Black conservatives, all three other groups evidenced political polarization as reflected in their differential contributions to political ingroup and outgroup members. However, the participant groups differed in both the size of the political identity effect and the influence of race on decisions. Somewhat surprisingly, White conservatives showed less political polarization than either White or Black liberals but differed from White liberals in the size and direction of racial bias. It should be noted that these results were obtained just prior to the 2020 presidential election in the United States, where Republican Donald Trump was up for re-election, and the Black Lives Matter (BLM) movement was

prominent in the news and social media. This historical backdrop is potentially relevant for comparison with our own later study.

STUDY 2: REPLICATION

The design of this second study was essentially the same as that of Ugurlar et al., with two potentially important differences. The first difference was in timing; data collection for this replication was conducted between January and May 2022, almost midway into a Democratic administration but well in advance of the midterm elections. Second, the design of the materials for the cross-categorization experiment included additional filler information intended to reduce the prominence of race and political identity in the descriptions of partners in the PD game. Thus, the new study provided a replication that tests the robustness of the politics × race interaction effects under conditions where political identity was less salient.

Method

The procedures and measures used in this study were reviewed and approved by the Northern Arizona University Institutional Review Board. Because the study was exploratory, no specific predictions were preregistered. Data, analysis code, and study material can be found at https://osf.io/d4ksr/.

Participants engaged in the same modified PD game as that used in the Ugurlar et al. study with a series of other players who were identified in terms of their race, political ideology, and place of residence. The nature of the decision to be made in each trial of the game was whether to contribute some of one's own endowment to the other player who was simultaneously making a parallel decision. The purpose of the experimental design was to determine the extent to which cooperative giving is influenced by the match between participants' own social identities and those of their partners, and whether racial identity or political identity would have the greater effect on decision-making.

Participants

Approximately, equal numbers of Black and White US participants were recruited from the Qualtrics online study pool for participation in this study. The data were collected in two waves (see Supplement B for details) with a total N of 445 (164 males, 281 females). All participants who were included in the data analysis were self-identified as Black (n=218) or White (n=227) and as liberals (n=251) or conservatives (n=194) in their political ideology. Participants were also asked whether they resided in an urban, suburban, or rural area.

Procedure

Participants accessed the study online. Potential respondents were invited to participate in the study through the Qualtrics platform with a preliminary description of the study as an investigation of how people make decisions when interacting with others. Demographic screening was used so that only respondents who identified as Black or White adult US citizens were allowed to continue into the study. Participants were admitted until the targeted number of Black and White respondents had been reached. Participants received \$4.50 payment for participating and were told that they would also be entered into a drawing to receive a \$50 Target

14679221.0, Downloaded from https://onlineithmy.wiley.com/doi/0.1111/psp.79047 by Hirodaka Inada - Royal Holoway, Univ Of London, Wiley Online Library on [1306/2025]. See the Terms and Conditions (https://onlineithmy.wiley.com/rems-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Create Common Library on [1306/2025]. See the Terms and Conditions (https://onlineithmy.wiley.com/rems-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Create Common Library on [1306/2025]. See the Terms and Conditions (https://onlineithmy.wiley.com/rems-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are governed by the applicable Create Common Library for rules of use; OA articles are gove

gift card, with their chances determined by the number of points they held at the end of the study.

At the start of the study, all selected participants responded to some additional demographic items that included our measures of political ideology and residence. Respondents were asked to select their political orientation from four options: "liberal," "moderately liberal," "moderately conservative," or "conservative." Thus, all participants were classified as either liberal or conservative based on their response to this forced-choice item. Respondents were also asked to classify where they currently lived as "urban," "suburban," or "rural."

After completing the demographic items, participants were told that they would be interacting with other participants online, and that some participants had been asked to upload a photo but that they were not randomly selected to upload a photo. In actuality, the other participants were experimentally created.

Participants were then given instructions about the decision-making game they would engage in. On each trial, the participant and their partner would be given 10 "coins" (points) which they could choose to keep or to share with their partner. Every point given to the partner would be doubled in value, so if both partners chose to share, their total points would be increased. However, the decision to give to the partner had to be made without knowing what decision the partner was making. Participants were provided with a chart showing the outcome of joint decisions and a test of comprehension before beginning the task (see Supplement C for details).

Participants then engaged in the game across a series of trials, each participant making a total of 12 decisions with a different "partner" for each decision trial. Four of these were included as fillers (those involving an Asian and those involving a partner with no picture) and were excluded from analysis. Descriptive information provided about each partner on the critical trials was systematically varied by race (Black or White, as identified by a verbal label accompanied by a facial photo) and political ideology (liberal or conservative), with residence (urban, suburban, rural) as another filler descriptor (fully crossed with the other two categories). To avoid adding another dimension of social differentiation, the sex of partners was held constant, with all partners matching the participant's own sex (male or female). (For specifics of the partner descriptions and presentation order, see Supplement D.)

After each decision trial, participants were not told what the "other participant" had given so that this information would not influence subsequent decisions. At the end of the session, participants were provided with a debriefing that explained the deception and gave them the opportunity to voluntarily participate in the promised lottery (with each entrant having an equal chance of winning).

Results

Partner characteristics (race and political ideology) were coded as "ingroup" (if matching the participant) or "outgroup" (if different from the participant). The data on the amount given by each participant to each partner was analyzed as a 2 (participant race: Black or White) × 2 (participant ideology: liberal or conservative) × 2 (partner race: ingroup or outgroup) × 2 (partner politics: ingroup or outgroup) mixed ANOVA, with the first two variables as betweensubject factors and the latter two variables within-subject.

ANOVA results (see full table in Supplement E) showed no significant main effects of participant race or political ideology. There was a significant main effect of partner race (F(1, 441) = 12.41, p < .001), with higher amounts given to ingroup partner (Mean = 5.52) than to outgroup partners (Mean = 5.20). There was also a significant main effect of partner politics (F(1, 441) = 66.49, p < .001), again with higher values to ingroup partners (Mean = 5.76) than to outgroup partners (Mean = 4.95). Importantly, however, these partner effects were

14679221.0, Downloaded from https://onlineithmy.wiley.com/doi/oi/1111/pops/9047 by Hirodaka Inada - Royal Holoway, Univ Of London, Wiley Online Library on [1306/2025]. See the Terms and Conditions (https://onlineithmy.wiley.com/rems-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Created Commons Liences

qualified by significant interactions with participant characteristics. Specifically, there was a significant participant race \times participant ideology \times partner race effect (F(1, 441) = 4.62, p = .032), and a significant participant race × participant ideology × partner politics effect (F(1, 441) = 6.06, p = .014), indicating that the relative effects of shared race and ideology varied depending on both the race and political ideology of the participant, as had been obtained in Study 1.

As in Study 1, to fully understand the nature of the participant-partner interactions, the data were broken down by participant race x ideology, and the effects of partner characteristics were analyzed separately for each category. Mean contributions for all four groups are displayed in Figure 2.

Mean amounts given to partners by White liberals are presented in Figure 2A. For participants in this demographic group, partner political identity had a significant main effect on giving $(M_{\text{ingroup}} = 6.04, M_{\text{outgroup}} = 5.18, F(1, 111) = 18.02, p < .001, partial eta squared = .14)$ and partner race had a smaller but significant main effect as well $(M_{\text{ingroup}} = 5.42, M_{\text{outgroup}} = 5.80, M_{\text{outgroup}}$ F(1, 111) = 5.72, p = .018, partial eta squared = .05). As in Study 1, the race effect for White liberals was in the direction of preference for outgroup over ingroup members. There was no statistically significant interaction effect, but as a consequence of racial outgroup favoritism, the effect of political difference was greater when the partner was White, and the double outgroup member received more cooperation than the partial ingroup member (t(111) = -3.02, p = .016)(overall pattern: $I_pO_r \ge I_pI_r = O_pO_r > O_pI_r$).

Mean amounts given as a function of partner race and political identity by White conservatives are presented in Figure 2B. As for White liberals, the effect of partner political identity was strong and statistically significant ($M_{\rm ingroup} = 5.98$, $M_{\rm outgroup} = 4.28$, F(1, 114) = 64.17, p < .001, partial eta squared = .36). In contrast to Study 1, there was no significant effect of partner race. When the partner was a member of the political ingroup, cooperation was high and significantly lower when the partner was a member of the political outgroup, regardless of the partner's race.

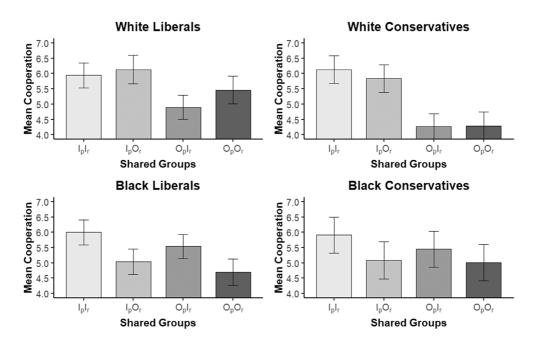


FIGURE 2 Mean contribution by each subgroup: Study 2. Bars indicate .95 confidence interval.

14679221.0, Downloaded from https://onlineithmy.wiley.com/doi/oi/1111/pops/9047 by Hirodaka Inada - Royal Holoway, Univ Of London, Wiley Online Library on [1306/2025]. See the Terms and Conditions (https://onlineithmy.wiley.com/rems-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Created Commons Liences

TABLE 1 Comparison of results from Study 1 and Study 2: Ordering of crossed categories in terms of size of contributions.

Participant subgroup	Study 1	Study 2
White liberals	IpOr≥IpIr>OpOr≥OpIr	IpOr≥IpIr>OpOr>OpIr
White conservatives	IpIr≥IpOr≥OpIr≥OpOr	IpIr≥IpOr>OpIr=OpOr
Black liberals	IpIr>IpOr>OpIr≥OpOr	IpIr>OpIr>IpOr>OpOr
Black conservatives	$IpIr \ge IpOr = OpIr = OpOr$	$IpIr \ge OpIr > IpOr = OpOr$

Note: ≥, marginally greater than; >, significantly greater than.

Mean results for participants who identified as Black liberals are presented in Figure 2C. Like White liberals, Black liberals showed a significant (but smaller) effect of partner political identity ($M_{\rm ingroup} = 5.52$, $M_{\rm outgroup} = 5.12$, F(1, 138) = 5.55, p = .020, partial eta squared = .04). The main effect of partner race was also significant and in the direction of ingroup preference ($M_{\rm ingroup} = 5.77$, $M_{\rm outgroup} = 4.87$, F(1, 138) = 29.68, p < .001, partial eta squared = .18), and there was no significant interaction effect of partner race and political identity. Black liberals showed a clear additive effect, with highest amounts given to partners that shared both ingroups and lowest amounts to the double outgroup partners. However, in contrast to the results for this group in Study 1, the effect of political identity was dampened and the effect of partner race was stronger.

Mean data for participants who identified as Black conservatives are presented in Figure 2D. As for Black liberals, there was a strong significant effect of partner race on the amount given in the direction of ingroup bias ($M_{\text{ingroup}} = 5.68$, $M_{\text{outgroup}} = 5.05$, F(1, 78) = 6.51, p = .013, partial eta squared = .08). However, the main effect of politics was not statistically significant, F(1, 78) = 2.23, p = .14, and the effect of race was not moderated by partner political identity. The negative impact of partner outgroup race was equivalent, regardless of whether the partner shared the conservative ingroup identity.

DISCUSSION

For purposes of ease of comparison, Table 1 provides a summary of the patterns of contribution as a function of participant race and political identity and partner race and political identity for both studies.

Considering the very different political contexts within which the two studies reported here were conducted, the overall similarity of results is remarkable. In both studies, three of the subgroups exhibited some degree of political polarization in that respondents were less trusting or cooperative with a partner who identified with the political outgroup. However, there were significant differences obtained in both studies in the relative weight attached to politics versus race as a function of the respondent's own race and political identity. The similarity of findings supports the contention that patterns of response to race×politics cross-categorization are moderated by respondents' own social identities.

Across the two studies, the pattern of contributions obtained for White liberals was particularly stable. In both 2020 and 2022, this subgroup showed strong political polarization (albeit somewhat smaller in Study 2) but also exhibited outgroup favoritism with respect to race and was most negative in responding to the partial ingroup of White conservatives. Preferential treatment of Black partners is consistent with research on aversive racism (e.g., Nail et al., 2003) and White guilt (e.g., Swim & Miller, 1999). In general, in tasks that involve explicit, deliberative judgments or decision-making, White liberals tend to exhibit either no

racial bias or some degree of outgroup bias as a function of their motivation to avoid prejudice (Devine et al., 2002).

The pattern of mean contributions for White conservatives was also quite similar across the two studies. In both cases, the pattern was additive but with the effect of partner political identity dominating the effect of race. In Study 2 particularly, bias based on political identity swamped race effects for White conservatives, and the size of the political identity effect was greater than had been obtained in Study 1. Overall, however, the evidence of political polarization was strong across both studies for all White participants.

The most notable difference between the two studies was in the findings for relative weight of politics versus race for Black liberals. In 2020 (Study 1), the political identity factor dominated race in the pattern of contributions for this subgroup. But in 2022 (Study 2), the dominance pattern was reversed, and the effect of partner race was greater than that of partner politics. This variation could be attributed to sampling differences, but the samples were drawn from similar online participant pools, and given the within-subject statistical comparisons, the sample size for this group in both studies (n > 130) was sufficient to provide reliable effect sizes. We speculate that the change in pattern for Black liberals meaningfully reflects changes in the nature of the relationship between political ideology and race over the 2-year period. September 2020 was a particularly racially charged period in the United States, 4 months after the killing of George Floyd and the height of the BLM movement. White liberals, in general, were seen as sympathetic to BLM and participated as allies in many of the associated protests. For politically active Blacks, then, racial and liberal political identities were highly convergent, and the primary outgroup was defined by political identity. By 2022, backlash against police reform efforts and other BLM demands had reduced Black trust in liberal ideology, and the ingroup—outgroup difference based on race became more salient than that based on politics. This change over time suggests that the interaction between own and partner race and politics is further moderated by the nature of the perceived relationship between racial attitudes and political identity in the current political context.

Finally, the results from both studies leave open questions about the nature of political identity for Black conservatives. Consistent with the distribution of political affiliation and race in the US population at large, both studies had difficulty recruiting participants who were Black and self-identified as conservatives, so the sample size (and statistical power) for this subgroup was substantially lower than that for the other three groupings. Nonetheless, the pattern of responses for Black conservatives was very similar across the two studies, showing relatively little differentiation in contributions as a function of partner political identity and a small ingroup bias effect based on race that reached statistical significance only in Study 2. Clearly, we need further research to investigate how the intersectionality of being Black and conservative functions. For this group, the distinction between economic conservatism and social conservatism may be particularly important, so that the meaning of self-identification as conservative might be quite different than that for White conservatives. It is also possible that the alignment of political ideology and political party affiliation may be weaker for Black conservatives and their political identity more complex. Future research might investigate more systematically the differential effects of party identity, political ideology, and race as cross-cutting categories for this group in particular.

Implications for political polarization

Although effect sizes for White respondents (and Black liberals) varied somewhat across time, in both studies, the political identity of the partner had a significant impact on cooperative decisions. This consistency is notable considering that there are a couple of reasons why these studies might underestimate the role of political identity in interpersonal exchanges. First is

the fact that in both studies the cue to political identity was ideological orientation rather than party affiliation. It might well be argued that party identification is a stronger or more direct cue to political attitudes and voting behavior than liberal–conservative ideology, and for that reason elicits a stronger ingroup—outgroup differentiation. Further, in Study 2, participants were forced to place themselves on one side or the other of the ideological spectrum. Thus, respondents were not selected for strength of identification with their stated orientation nor for degree of political engagement. Nonetheless, for the majority of these participants just knowing that their partner self-identified with the ideological outgroup was sufficient to reduce prosocial behavior.

In addition to revealing significant discrimination based on the political identity of the partner, the effect size associated with partner politics was larger than the effect size of partner race for White respondents in both studies. This finding does not necessarily mean that the alignment of race and political partisanship in the United States does not play a role in polarization based on political ideology. Although racial and political ideology were systematically crossed in the stimulus information within these experiments, the perceived relationship between race and political party affiliation in the United States is highly correlated rather than orthogonal. There is good evidence that the images (schematic representations) of Republicans and Democrats have become increasingly racialized over time (Zhirkov & Valentino, 2022), and by extension, the liberal-conservative distinction has also become associated with racerelated political attitudes. As a consequence, politics and race may be conflated in the sense that political party or ideology is a cue to racial attitudes (rather than racial identity per se). This conflation is supported by our finding that White liberals consistently discriminated in favor of Black partners across both studies, whereas White conservatives discriminated against Black partners (significantly so in Study 1). Implied attitudes toward racial equality (and associated policies) may be more important than objective racial identity in defining the political divide for White Americans.

CONCLUSION

What is both novel and meaningful about the results from both studies reported here is the clear finding that the impact of both politics and race on interpersonal cooperation is moderated by the interaction of political and racial identity of the participants. Future research on the nature of political polarization in the United States must be sensitive to subgroup differences in both perceptions and affect attached to political identity.

ACKNOWLEDGMENTS

The authors have nothing to report.

DATA AVAILABILITY STATEMENT

The design and analyses of the present study were not preregistered in an independent institutional registry. The authors will make the data, analytic methods, and materials for Study 2 available to other researchers via a link to an OSF webpage.

ORCID

Marilynn B. Brewer https://orcid.org/0000-0003-3360-003X

REFERENCES

Balliet, D., Tybur, J. M., Wu, J., Antonellis, C., & Van Lange, P. A. (2018). Political ideology, trust, and cooperation: Ingroup favoritism among Republicans and Democrats during a U.S. national election. *Journal of Conflict Resolution*, 62, 797–818.

- Balliet, D., Wu, J., & De Dreu, C. K. W. (2014). Ingroup favoritism in cooperation: A meta-analysis. *Psychological Bulletin*, 140, 1556–1581.
- Carlin, R. E., & Love, G. J. (2013). The politics of interpersonal trust and reciprocity: An experimental approach. Political Behavior, 35, 43–63.
- Crisp, R. J., & Hewstone, M. (2007). Multiple social categorization. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 39, pp. 163–254). Academic Press.
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality and Social Psychology*, 82, 835–848.
- Dunn, A. (2020, February 27). 5 facts about black Democrats. Pew Research Center Report.
- Egan, P. J. (2020). Identity as dependent variable: How Americans shift their identities to align with their politics. American Journal of Political Science, 64, 699–716.
- Finkel, E., Finkel, E. J., Bail, C. A., Cikara, M., Ditto, P. H., Iyengar, S., Klar, S., Mason, L., McGrath, M. C., Nyhan, B., Rand, D. G., Skitka, L. J., Tucker, J. A., Van Bavel, J. J., Wang, C. S., & Druckman, J. N. (2020). Political sectarianism in America. *Science*, 370(6516), 533–536.
- Fowler, J. H., & Kam, C. D. (2007). Beyond the self: Social identity and political participation. The Journal of Politics, 69, 813–827.
- Hewstone, M., Islam, M. R., & Judd, C. M. (1993). Models of crossed categorization and intergroup relations. *Journal of Personality and Social Psychology*, 64, 779–793.
- Houston, D. M. (2024). Polarization, partisan sorting, and the politics of education. *American Educational Research Journal*, 61, 508–540.
- Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, 22, 129–146.
- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: Social identity perspective on polarization. Public Opinion Quarterly, 76, 405–431.
- Iyengar, S., & Westwood, S. J. (2015). Fear and loathing across party lines: New evidence on group polarization. American Journal of Political Science, 59, 690–707.
- Kinder, D. R., & Kalmoe, N. P. (2017). Neither liberal nor conservative: Ideological innocence in the American public. University of Chicago Press.
- Levendusky, M. (2009). The partisan sort: How liberals became Democrats and conservatives became Republicans. University of Chicago Press.
- Margolis, M. (2018). From politics to the pews: How partisanship and the political environments shape religious identity. University of Chicago Press.
- Mason, L. (2015). I disrespectfully agree: The differential effects of partisan sorting on social and issue polarization. *American Journal of Political Science*, *59*, 128–145.
- Mason, L. (2016). A cross-cutting calm. How social sorting drives affective polarization. *Public Opinion Quarterly*, 80, 351–377.
- Mason, L. (2018). Uncivil agreement: How politics became our identity. University of Chicago Press.
- Mason, L., & Wronski, J. (2018). One tribe to bind them all: How our social group attachments strengthen partisanship. *Political Psychology*, 39, 257–277.
- Mullen, B., Migdal, J. J., & Hewstone, M. (2001). Crossed categorization versus simple categorization and intergroup evaluations: A meta-analysis. *European Journal of Social Psychology*, 31, 721–736.
- Nail, P. R., Harton, H. C., & Decker, B. P. (2003). Political orientation and modern versus aversive racism: Tests of Dovidio and Gaertner's (1998) integrated model. *Journal of Personality and Social Psychology*, 84, 754–770.
- Rand, D. G., Pfeiffer, T., Dreber, A., Sheketoff, R. W., Wernerfelt, N. C., & Benkler, Y. (2009). Dynamic remodeling of in-group bias during the 2008 presidential election. *Proceedings of the National Academy of Sciences of the United States of America*, 106, 6187–6191.
- Robison, J., & Moskowitz, R. (2019). The group basis of partisan affective polarization. *Journal of Politics*, 81, 1075–1079.
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. Personality and Social Psychology Review, 6, 88–106.
 Swim, J. K., & Miller, D. L. (1999). White guilt: Its antecedents and consequences for attitudes toward affirmative action. Personality and Social Psychology Bulletin, 25, 500–514.
- Ugurlar, P., Dorrough, A., Isler, O., & Yilmaz, O. (2023). Shared group memberships mitigate intergroup bias in cooperation. Social Psychological and Personality Science, 16, 214–223.
- Urban, L. M., & Miller, N. (1998). A theoretical analysis of crossed categorization effects: A meta-analysis. *Journal of Personality and Social Psychology*, 74, 894–908.
- Van Bavel, J., & Pereira, A. (2018). The partisan brain: An identity-based model of political belief. *Trends in Cognitive Sciences*, 22(3), 213–224.
- Westwood, S. J., & Peterson, E. (2022). The inseparability of race and partisanship in the United States. *Political Behavior*, 44, 1125–1147.

Zhirkov, K., & Valentino, N. A. (2022). The origins and consequences of racialized schemas about U.S. parties. *The Journal of Race, Ethnicity, and Politics*, 7, 484–504.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Willcox, K. J., Imada, H., Rumble, A. C., Yansen, D., & Brewer, M. B. (2025). Effects of race and political identity on interpersonal cooperation: A secondary analysis and replication. *Political Psychology*, 00, 1–14. https://doi.org/10.1111/pops.70047