The Minority-Groups Homogeneity Effect: Seeing Members of Different Minority Groups as More Similar to Each Other Than Members of the Majority

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Author Note

Data and materials for all studies, and pre-registrations for four studies, are available at https://osf.io/z7x9g/?view_only=1767922f89b342f8bf50cfc1d68c81e1. Correspondence concerning this article can be addressed to Stephanie Tepper (sjt92@cornell.edu).

Abstract

The widely documented "outgroup homogeneity effect" refers to people's tendency to view members of groups to which they do not belong (outgroups) as more similar to one another than members of their own groups (ingroups). Here, we present evidence for a novel but related phenomenon: People tend to view members of different minority groups as collectively more similar to one another than members of the majority group are to one another. Across nine studies (and four studies reported in the Supplemental Materials), we demonstrate a robust "minority-groups homogeneity effect" among participants from both majority groups (Studies 1-5) and minority groups (Studies 6-8), albeit less consistently among the latter. We provide experimental support for the role of beliefs in the common fate of minorities in driving this effect: when participants are led to believe that minority groups do not share a common fate, they no longer rate them as more similar than the majority (Study 9). These studies shed light on a broad pattern of social perception that may influence how members of different groups interact with one another and how they respond to cultural and demographic changes in society.

Keywords: intergroup relations, stereotyping, diversity, social cognition

The minority-groups homogeneity effect: Seeing members of different minority groups as more similar to each other than members of the majority

Over the past 15 years, considerable media attention has been devoted to a coming demographic shift—the point at which the United States will become a "majority-minority" country. Currently estimated to occur sometime in 2042, the shift corresponds to the moment when racial and ethnic minority groups in the U.S. will together make up more than 50% of the American population (Frey, 2018, 2021; Goldman, 2008; Roberts, 2008; U.S. Census Bureau, 2012). This projection is based on a number of sociopolitical forces, including increasing immigration and differences in birth and death rates across different ethnic groups (Frey, 2018). At the same time that racial and ethnic demographics in the United States are expected to change, demographics are also changing along other identity dimensions, with, for example, more people identifying as members of the LGBTQ community (Jones, 2022). Similar demographic changes are taking place, or are expected to take place, in other parts of the world, including Canada (Statistics Canada, 2006), the United Kingdom (Coleman, 2010), and parts of continental Europe (Parsons & Smeeding, 2006).

Social scientists have documented various responses to the projected changes in the demographic landscape, particularly among members of current majority groups. Most notably, many White Americans feel threatened by increasing racial and ethnic diversity in the U.S. (for a review, see Craig et al., 2018). Such responses to increasing diversity on the part of majority group members tend to be explained by the fear that an increase in the size of minority groups will threaten the majority's dominant status (Craig & Richeson, 2014). That is, as the different minority groups in the U.S. gain in size, the majority will lose status and influence, and even be "replaced" (Obaidi, 2021). Such feelings of threat are reinforced by a tendency on the part of

majority group members to overestimate the current size and influence of minority groups in society (Alba et al., 2005; Gallagher, 2003; Gorodzeisky & Semyonov, 2020). As early as 2000, about half of American survey respondents thought that White people were already a numerical minority, despite making up about 75% of the U.S. population at the time (Alba et al., 2005; U.S. Census Bureau, 2001).

The concern on the part of White Americans about looming demographic shifts is likely further reinforced by misperceptions of the extent of existing racial and ethnic inequalities in the United States. Surveys have shown that White Americans tend to overestimate racial progress and underestimate racial economic inequality, believing that wealth gaps between White Americans and racial minority groups are vastly smaller than they actually are (Kraus et al., 2017, 2019; Kuo et al., 2020; Richeson, 2020). Many White Americans also fail to recognize or acknowledge the advantages of being White, as their advantages may lack salience and are often less apparent than the disadvantages faced by racial minority group members (Davidai & Gilovich, 2016; Knowles et al., 2014; Phillips & Lowery, 2018; Wu & Dunning, 2020). Any such lack of awareness of ongoing racial inequality can lead White Americans to view increasing racial diversity as support for the narrative that they are losing social, economic, and political status. Indeed, surveys indicate that politically conservative White Americans tend to believe that anti-White bias is a bigger issue than anti-Black bias (Rasmussen et al., 2022), suggesting that conservatives may be especially susceptible to claims that White people are losing status and influence.

These considerations notwithstanding, the concern about looming demographic changes on the part of non-Hispanic White Americans can nonetheless be considered surprising in at least one respect. Even after the U.S. becomes a majority-minority country, White Americans will

continue to be the largest racial or ethnic group for decades to come (Alba, 2018; Alba et al., 2021). In other words, even though the *sum* of the populations of all minority groups is projected to outnumber the population of White Americans, each minority group on its own will still be substantially smaller than the White population. This numerical advantage, in addition to other structural advantages afforded to White Americans, makes it very likely that they will continue to have the most political, economic, and cultural clout far into the future. In turn, the advantages that White Americans enjoy when it comes to health, wealth, education, and longevity (e.g., Akee et al., 2019; Lopez et al., 2021; Merolla & Jackson, 2019) are unlikely to disappear in the absence of policy interventions targeted at addressing these underlying inequities (e.g., Bailey et al., 2021).

This begs the question of whether there are other reasons why so many White Americans are so deeply troubled about looming demographic changes in the United States. The research reported here was designed to examine another potential contributor. Specifically, we assess whether people tend to have an exaggerated sense of the homogeneity of members of different minority groups, seeing members of distinct minority groups as having shared values and traits. In nine studies (and four supplementary replications or extensions) involving several different majority and minority identities, we test whether people exhibit a "minority-groups homogeneity effect," perceiving members of different minority groups as more similar to one another than members of a single majority group. Any such tendency is likely to intensify majority group members' concerns about changing demographics because it encourages the idea that different minorities have more in common with each other than with members of the majority and therefore may act in ways, including politically, that run counter to the interests of the majority.

We propose that the perceived homogeneity of different minority groups stems from the belief that minority groups in the U.S. and elsewhere share a common fate—that they have a degree of shared history, shared experiences of being marginalized, and shared political outlook and values (Craig & Richeson, 2016; Knowles et al., 2022). This belief may be exacerbated by the fact that members of minority groups are often seen as more committed to social justice than members of majority groups, likely due to shared histories of experiencing and fighting injustice (Saguy et al., 2020). And, just as people of color in the U.S. may be seen as sharing a common fate, so too may members of the LGBTQ community, immigrant populations, and other minority groups, relative to members of their respective majority groups.

Majority and Minorities as "Us vs. Them"

A tremendous amount of research testifies to the widespread tendency to organize the social world into ingroups and outgroups, or "us" and "them." (Brewer, 1999; Cikara & Van Bavel, 2014; Maass et al., 1989; Tajfel & Billig, 1974). Indeed, dividing the world into us and them can quickly slide into "us *versus* them," a tendency that is reflected in the prevalence of zero-sum beliefs about one's own group and various outgroups. That is, people often believe that any gains for an outgroup will necessarily result in losses for the ingroup (Davidai & Tepper, 2023; Wilkins & Kaiser, 2014). Just as research has documented a tendency among White Americans to exhibit zero-sum beliefs regarding a particular outgroup, such as Black Americans, there may be a parallel tendency to assume a zero-sum relationship between the ingroup and *all* outgroups combined. The frequently reinforced division between majority and minority groups may further foster a tendency for people to view, in zero-sum terms, social relations in terms of the majority vs. minorities in the aggregate.

A notable corollary of the "us vs. them" dichotomy is the outgroup homogeneity effect, or the tendency to perceive members of an outgroup as more similar to one another than members of one's ingroup (e.g., Jones et al., 1981; Judd & Park, 1988; Quattrone & Jones, 1980). This phenomenon takes many forms, most directly in the tendency to rate outgroups as being less variable than the ingroup on personality traits and behavioral characteristics (e.g., Jones et al., 1981). People also have better recall for individual ingroup members than individual outgroup members (Lorenzi-Cioldi, 1993; Ostrom et al., 1993) and show better recognition of ingroup faces than outgroup faces—i.e., the well-known cross-race effect (Chance & Goldstein, 1996; Hughes et al., 2019; Meissner & Brigham, 2001). Furthermore, when asked to identify different subgroups within a given group, people list more for their ingroup than they do for various outgroups, suggesting a greater belief in ingroup heterogeneity (Linville et al., 1996; Park et al., 1992).

The outgroup homogeneity effect (and especially the cross-race effect) can have negative consequences, such as eyewitness misidentification in the legal system, wherein people are less accurate in identifying members of racial outgroups in a line-up (e.g., Wilson et al., 2013). Furthermore, experimentally *increasing* the perceived variability of an outgroup results in diminished prejudice, suggesting a causal link between perceived outgroup homogeneity and attitudes toward outgroups (Brauer & Er-rafiy, 2011).

Perceiving Minorities as Homogeneous

If everyday language is a guide, it is clear that people are often categorized in ways that reinforce boundaries not just between ingroup and outgroup (e.g., White people vs. Black people; women vs. men) but also between a majority group and various minority *groups* (e.g., White people vs. people of color; straight people vs. LGBTQ people; Christians vs. non-

Christians; native-born citizens vs. immigrants from various countries). The use of a superordinate label to describe members of different minority groups simultaneously creates a division between the majority group and those minorities and lumps the different minority groups together (Lasher & Campano, 2022; Malesky, 2014). Note that these labels imply that the proposed *minority-groups homogeneity effect* may be exhibited both by members of the majority and members of the various minority groups because majority vs. minorities divisions, and the labels associated with those divisions, may be salient for members of all of these groups.

The same is true of another potential contributor to the tendency to group minorities together—the fact that members of different minority groups often share common experiences of marginalization. This can create greater feelings of kinship on the part of members of different minority groups and a greater sense of a gap between the majority and various minorities—a gap recognized by members of majority and minority groups alike. For example, in the U.S., both Black and Hispanic families have significantly less wealth on average than White families (Bhutta et al., 2020), creating a potential dimension of common experience between Black and Hispanic people. Indeed, the experiences of structural inequality and discrimination can lead to feelings of solidarity and commitments to social justice among minority group members, even along different dimensions of identity, bolstering the binary division between majority and minorities (Craig & Richeson, 2016; Saguy et al., 2020).

These shared experiences of marginalization may also fuel stereotypes and beliefs that apply broadly to members of different minority groups, such as the belief that minority group members are less objective in some areas (e.g., in their role as journalists) but more knowledgeable about topics like discrimination (Crosby & Monin, 2013; Torrez, Dupree, & Kraus, 2024; Wallace, Craig, & Wegener, 2024). Furthermore, members of minority groups are

assumed to be more accepting of other minority groups and to have a greater obligation to support one another (Fernández et al., 2014; Warner & Branscombe, 2012). These beliefs imply that people have broad expectations of how minority group members feel about social issues, which may underscore a belief in their common fate among both majority and minority group members.

At the same time, research on social identity offers several reasons to believe that the tendency to group different minorities together may be much stronger for members of the majority than for members of minority groups. For one, research on the psychology of intergroup relations has shown that ingroup positivity and identification is as much a cause of prejudice as outgroup negativity (Brewer, 1999). Strong ingroup identification among majority group members may thus contribute to a tendency to create a firm division between the ingroup and all outgroups, resulting in a broad, nebulous lumping-together of all minority groups. At the same time, ingroup favoritism on the part of minority group members should lead them to draw a distinction between their own group and other minorities.

Furthermore, the psychology underlying the well-documented outgroup homogeneity effect (Linville et al., 1996; Park et al., 1992; Park & Judd, 1990) implies that any tendency to lump different minority groups together should be stronger for members of the majority. Most important, people tend to interact more with members of their ingroup than with members of different outgroups. For the majority, this gives rise to a detailed sense of the diversity of their own group and leaves them with only a vague sense of members of different outgroups as "other." The proposed *minority-groups homogeneity effect* is the natural result. For minority group members, in contrast, greater exposure to members of their own group may encourage the

belief that their own group is more variable than both the majority and other minority groups, thus undermining any minority-groups homogeneity effect.

The Present Research

The following nine studies and four Supplemental Studies were designed to test whether people believe that members of different minority groups are more alike than members of the majority. We tested this hypothesis and explored its underlying mechanisms by asking participants to rate the similarity of people within a majority group or people across different minority groups on a number of traits and characteristics. Across different studies, we asked participants about racial and ethnic groups in the U.S., heterosexual and LGBTQ individuals, the English and other members of the United Kingdom, and fictional majority and minority groups. We predicted that we would find evidence of a *minority-groups homogeneity effect* on the part of members of the majority, but, as noted above, we had no firm prediction about whether such an effect would be observed among members of different minority groups.

Transparency and Openness

For all studies, we report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. All sample sizes were determined in advance, following a heuristic of 100 participants per condition. Unless otherwise noted, these sample sizes allowed us to detect effects for primary analyses as small as d = 0.40 with 80% power (G*Power sensitivity analysis: two-tailed, independent samples t-test; Faul et al., 2007). Data were analyzed with R (version 4.0.2; R Core Team, 2020) via RStudio (version 1.3.1073; RStudio Team, 2020), primarily using the packages *tidyverse* (Wickham et al., 2019), *emmeans* (Lenth, 2020), and *lsr* (Navarro, 2015). Some of our studies were pre-registered and are indicated

as such. All survey materials, data, and analysis scripts are publicly available at https://osf.io/z7x9g/.

Study 1

As an initial test of the *minority-groups homogeneity effect*, we examined whether racial majority group members (White people in the U.S.) believe that members of distinct minority groups (people of color in the U.S.) are more similar to one another than are members of the majority in terms of their political interests, attitudes, and influence. We also examined whether the extent to which participants thought that members of the different minority groups were similar to one another was correlated with their concerns about the U.S. becoming a "majority-minority" country. More specifically, we examined whether participants' beliefs about minority-group similarity were related to their concerns about the changing demographic landscape of the United States. Finally, we were interested in whether any such *minority-groups homogeneity effect* might be amplified when the minority groups in question are described with an overarching label (e.g., as "people of color") or not (e.g., as "Black Americans," "Asian Americans," "Hispanic Americans," etc.).

Method

Participants. Three hundred participants (147 women, 150 men, 3 non-binary people; mean age = 38.63) were recruited from Prolific (www.prolific.co). Participation was restricted to U.S. residents who identified as White (monoracial) and non-Hispanic.

Procedure and measures. Participants were invited to complete a 4-minute survey about demographic groups in the United States and were randomly assigned to one of three conditions, which asked them to assess the similarity of members of: (a) the majority group ("White people"); (b) individuated minority groups ("Black Americans, Native Americans, Asian

Americans, Pacific Islanders, Latino Americans, and Multiracial people"); or (c) the same minority groups listed individually and labeled with an umbrella term ("people of color in the U.S. [people who are Black, Native American, Asian American, Pacific Islander, Latino American, or Multiracial]"). Participants read the following instructions:

In this set of questions, you will be asked to rate how similar [e.g., White people] are to one another. Please note that you will be asked to rate your impression of how similar these group members are on average, recognizing that members of all groups can be very different from one another.

In each condition, participants rated how similar they thought members of their assigned group(s) are to one another on five items—their political attitudes, their vision for America, their core values, the causes they care most about, and the cultural impact they have on the United States. They did so on a 7-point scale, with endpoints labeled (1) *Very dissimilar* and (7) *Very similar*. Responses to the five similarity items were highly intercorrelated (Cronbach's alpha = 0.85), so we averaged them to create a composite measure of perceived similarity.

After providing their similarity ratings on all 5 items, participants were asked to consider what the U.S. would be like in 20 years (the year 2042) and to rate their agreement with a number of statements about the potential social, economic, and political status of people of color in the U.S. (e.g., "By 2042, people of color will have more political power than White people" and "By 2042, people of color will have higher social status than White people on average"). These ratings were also made on a 7-point scale, with endpoints labeled (1) *Strongly disagree* and (7) *Strongly agree*. Scores on these scales were also highly intercorrelated (Cronbach's alpha = 0.90), so they were averaged to create a composite measure of the anticipated future status of people of color. Finally, participants answered a question from Craig & Richeson (2014)

designed to measure "group status threat." They rated their agreement, on the same scale as above, with the statement: "If people of color increase in status, they are likely to reduce the influence of White Americans in society."

Results

A one-way ANOVA on participants' ratings of group similarity yielded a significant main effect of condition, F(2, 297) = 19.57, p < .001. Follow-up pairwise contrasts revealed that participants assigned to rate the similarity of members of different racial and ethnic minority groups in the U.S. provided higher ratings than those assigned to rate the similarity of members of the majority. Whereas those assigned to assess the similarity of White people in the U.S. provided a mean rating of 3.48 (SD = 1.22), those in both the individuated minority groups condition (M = 4.15, SD = 1.04), t(297) = 4.22, p < .001, Cohen's d = 0.59, and in the umbrella minority groups condition (M = 4.44, SD = 1.09), t(297) = 6.10, p < .001, Cohen's d = 0.83, provided significantly higher ratings. The similarity ratings in the latter two conditions did not differ significantly from each other, t(297) = -1.87, p = .15. In other words, White participants rated people of color as more homogeneous than White people on these items. This was true whether or not people of color were labeled as a singular (umbrella) group, suggesting a general tendency to rate people of color as more homogeneous regardless of how the groups are presented.

Perceived group similarity was positively correlated with the anticipated future status of people of color in the U.S. (our five-item measure; $M_{\text{overall}} = 3.60$, SD = 1.26) in both the majority group condition, r(100) = .20, p = .048, and umbrella minority groups condition, r(97) = .25, p = .01, but not in the individuated minority groups condition, r(97) = .11, p = .28. Similarity

ratings in all three conditions were not significantly correlated with the Craig & Richeson (2014) measure of group status threat, rs for each condition < .15, ps > .13.

Discussion

Even though people of color represent a heterogeneous, superordinate group made up of members of different racial and ethnic groups, participants nonetheless rated them as more similar to each other than White people are to each other in terms of various political attitudes and values, even when they were described without the overarching label "people of color." Moreover, the similarity ratings made by participants in the majority and umbrella minority groups conditions (but not the individuated minority groups condition) were correlated with their feelings of status threat, such that participants who perceived greater group similarity were more likely to believe that people of color will have higher political, social, and economic status than White people by the year 2042. However, the correlations with the future status measure in the two conditions were relatively small, and in none of the conditions were participants' assessments of similarity correlated significantly with a status threat measure that has been used in previous research. Overall, then, this study provided only weak evidence that perceived minority-groups homogeneity is related to group status threat.

The results of Study 1 indicate that White people think that people of color are more homogeneous than their own group is, at least when it comes to political attitudes and values. Although this may represent a generalized minority-groups homogeneity effect, it could also be an artifact of participants' belief that people of color tend to lean left politically and thus share a political outlook, but not more general traits. To examine the latter possibility, we asked participants about more general, non-political traits in all subsequent studies.

Another potential artifactual interpretation of these results is that participants in the two minority groups conditions interpreted the similarity question as calling for them to assess the similarity of members *within* the different minority groups, not within and between them. If that were the case, it would reflect a tendency for people to believe there is less variability among members of smaller groups than among larger groups.

Two important considerations call such an interpretation into question. First, interviews with a handful of pilot participants failed to elicit any evidence that they were interpreting the dependent measure in that way. Second, as will be clear from the studies that follow, we phrased the key similarity measure in ways that made it increasingly unlikely that anyone would arrive at such an interpretation. In Study 2, for example, participants in the minority groups conditions were asked to rate the "similarity of two randomly-selected people from any of these groups," which implies that one person might be selected from one minority group and the second person from another minority group. That implication was stronger still in Study 3, in which participants in the minority-groups condition were asked to rate "the likely similarity of two randomly selected people from the LGBTQ community," which strongly implies that they could be from any part of the LGBTQ community—and thus potentially from different parts. The same is true of Study 6, which asked participants in the minority-groups condition to rate the similarity of two randomly selected "people of color." More telling still, participants in Study 8 were asked to rate the similarity of two randomly selected people from "within and across" Scotland, Wales, and Northern Ireland (countries which make up the minority nations of the U.K.) and to consider how similar people from each of these countries are "to members of their own group and to members of the other groups."

We obtained clear evidence of a minority-groups homogeneity effect in all of these studies, casting doubt on an alternative account of our findings whereby our results are due to participants taking the instructions to mean that they should rate the similarity of any two Black people, any two Asian people, etc., and not the similarity of any two people of color.

Study 2

The results of Study 1 suggest that there is a minority-groups homogeneity effect when it comes to assumed politically-relevant outlook and attitudes. To examine whether this effect applies more broadly to non-political dimensions, we measured perceived similarity on a range of items beyond politics, including personality traits, values, and other characteristics.

Method

Participants. Three hundred participants (147 women, 146 men, 5 non-binary people, 2 other gender; mean age = 38.36) were recruited from Prolific. Participation was restricted to U.S. residents who identified as White (monoracial) and non-Hispanic.

Procedure and measures. The procedure for Study 2 was nearly identical to Study 1, except that the similarity ratings were made using a broader set of nine items: helpfulness, openness to new experiences, extraversion, rudeness, religiosity, morality, politicalness, how much they value personal success, and how much they value a sense of community. We selected some of these items by consulting validated measures of values (Schwartz et al., 2001) and personality traits (John et al., 1991) and choosing items from those measures that would be easiest for participants to rate in the context of group evaluations. We also added novel items regarding life experiences (e.g., how religious and political they are) and other behavioral characteristics (e.g., how rude and helpful they are) to tap dimensions along which we thought people might regularly think about members of different groups. Responses to the nine items

were highly intercorrelated (Cronbach's alpha = 0.90), so we averaged them to create a composite measure of perceived similarity. As in Study 1, participants were randomly assigned to one of three conditions, which required them to assess the similarity of members of: (a) the majority group; (b) individuated minority groups; or (c) umbrella minority groups. Participants made these assessments using the following instructions, revised slightly from Study 1 (changes displayed here in bold) to improve clarity and reduce the likelihood that participants were providing ratings of similarity *within* minority groups as opposed to *across* minority groups:

In this set of questions, you will be asked to rate how similar [e.g., people of color in the U.S. (that is, people who are Black, Native American, Asian American, Pacific Islander, Latino American, and Multiracial)] are to on another. As you make these ratings, consider the likely similarity of two randomly selected people from any of these groups. Please note that you will be asked to rate your impression of how similar members of these groups are to each other on average, recognizing that members of all groups can be very different from one another.

Participants then answered the same status threat questions from Study 1.

Results

A one-way ANOVA on participants' ratings of group similarity yielded a significant main effect of condition, F(2, 297) = 19.17, p < .001. Follow-up pairwise contrasts revealed that, on this broader range of items, participants assigned to rate the similarity of members of different minority groups provided significantly higher ratings than those assigned to rate the similarity of White people in the U.S. Whereas those in the latter condition provided a mean similarity rating of 3.73 (SD = 1.00), those in both the individuated minority groups condition (M = 4.57, SD = 1.07), t(297) = 5.85, p < .001, Cohen's d = 0.81, and the umbrella minority groups condition (M = 4.57).

= 4.40, SD = 0.99), t(297) = 4.66, p < .001, Cohen's d = 0.68, provided significantly higher ratings. Similarity ratings in the latter two conditions did not differ significantly from each other, t(297) = 1.18, p = .47. In other words, White participants rated people of color as more homogeneous than White people on a set of items dealing with the similarity of their personalities, values, and other traits, regardless of whether the different minority groups were individuated or described using an umbrella label.

Next, we analyzed the relationship between similarity ratings and feelings of group status threat. Perceived similarity was positively correlated with the anticipated future status of people of color in the U.S. ($M_{\text{overall}} = 3.49$, SD = 1.11) in the majority group condition, r(99) = .25, p = .01, negatively correlated with this measure in the individuated minority groups condition, r(98) = -.22, p = .03, but not significantly correlated with this measure in the umbrella minority groups condition, r(97) = .14, p = .18. Similar patterns of correlations were observed using the Craig & Richeson (2014) measure of group status threat ($M_{\text{overall}} = 4.16$, SD = 1.47; majority group: r(99) = .21, p = .04; individuated minority groups: r(98) = -.26, p = .008; umbrella minority groups: r(97) = .02, p = .86).

Discussion

Despite the diversity of the groups represented under the umbrella term "people of color," White participants rated members of these minority groups as more homogeneous than members of the majority group on a range of traits and characteristics. Results did not differ whether the minority groups were represented by their umbrella label or only by their constituent groups. Studies 1 and 2 thus provide evidence for a minority-groups homogeneity effect on the part of the majority racial group in the U.S. with respect to their views of the country's most prominent racial and ethnic minority groups.

A reviewer of a previous version of this paper wondered whether these findings represent a difference in how people think about the collection of different minority groups versus the majority, or versus any single group, such as an individual minority group. Although it seems unlikely that people would think that members of several different minority groups are more similar on average than members of a single minority, we acknowledge the confound and subjected it to empirical test to establish some of the boundary conditions of the minority-groups homogeneity effect. Specifically, we ran a replication of Study 2 in which 100 participants were asked to rate the similarity of two randomly selected members from any of the six minority groups examined in the Studies 1 and 2 on the same traits and following the same instructions as Study 2. An additional 100 participants were randomly assigned to rate the similarity of members of a particular minority group—Black Americans, Asian Americans, Latino Americans, or Native Americans. Contrary to what we observed in Studies 1 and 2 (and in the studies that follow) there was no difference in the rated similarity of members of the collection of different minority groups (M = 4.42) and members of a particular minority group (M = 4.50), F(1, 198) = 0.32, p = .57.

The *minority-groups homogeneity effect* thus corresponds to a difference in the perceived variability of members of the majority versus members of different minority groups. But is this effect unique to assessments of racial and ethnic minorities in the U.S. on the part of the majority, or does it apply more broadly to other majority and minority groups? Study 3 was designed as a first step in exploring the breadth of this phenomenon.

Study 3

To begin to explore the breadth of the minority-groups homogeneity effect, we assessed participants' perceptions of minority similarity along a different identity dimension. Specifically,

we tested whether the minority-groups homogeneity effect applies to heterosexual people's perceptions of sexual and gender minorities (i.e., LGBTQ people). Much like racial and ethnic minorities, sexual and gender minorities are often grouped together under umbrella labels like "LGBTQ" or "queer." They also have shared histories and experiences of marginalization in the U.S. For example, the famous Stonewall Uprising of the late 1960s involved participation from gay, lesbian, bisexual, and transgender people alike (Lorenzo, 2019). We predicted that majority group members—cisgender, heterosexual people—would perceive the groups within the LGBTQ community (i.e., lesbian, gay, bisexual, transgender, and queer people) as more similar to one another than members of the majority are to one another.

Method

Participants. Two hundred participants (100 women, 99 men, 1 did not provide their gender; mean age = 36.55) were recruited from Prolific. Participation was restricted to U.S. residents who identified as cisgender and heterosexual.

Procedure and materials. Participants were invited to complete a 3-minute survey about social groups in the United States and were randomly assigned to one of two conditions, which asked them to assess the similarity of: (a) heterosexual individuals (the majority group); or (b) LGBTQ individuals (minority groups of lesbian, gay, bisexual, transgender, and queer individuals). Because ratings did not differ between the umbrella and individuated minority groups conditions in Studies 1 and 2, we omitted the individuated minority condition in Study 3. In each condition, participants rated how similar members of their assigned group(s) are to one another on the same traits and characteristics as in Study 2, using the following instructions (revised once again to reduce the likelihood that participants would rate the similarity within

groups—e.g., of two gay people or two transgender people, as opposed to the similarity *within* and across groups):

In this set of questions, you will be asked to rate how similar [heterosexual people (i.e., straight people) / LGBTQ people (i.e., lesbian, gay, bisexual, transgender, and queer people)] are to one another. As you make these ratings, consider the likely similarity of two randomly selected [heterosexual people / people from the LGBTQ community]. Please note that you will be asked to rate your impression of how similar members of [this group / the LGBTQ community] are to each other on average, recognizing that members of all groups can be very different from one another.

Responses to the similarity items were highly intercorrelated (Cronbach's alpha = 0.92), so we averaged them to create a composite measure of similarity.

Results

A one-way ANOVA of participants' ratings of group similarity yielded a significant main effect of condition, F(1, 198) = 28.30, p < .001, Cohen's d = 0.75, with participants who rated the similarity of LGBTQ individuals providing significantly higher ratings (M = 4.64, SD = 0.94) than those who rated the similarity of heterosexual individuals, or the majority (M = 3.78, SD = 1.31). In other words, cisgender, heterosexual participants rated members of the different sexual and gender minority groups as more homogeneous than the majority group to which they belong, providing additional support for a minority-groups homogeneity effect among majority group participants. Thus, the minority-groups homogeneity effect appears to extend beyond perceptions of racial and ethnic minority groups to perceptions of minority groups along at least one other dimension of identity.

Discussion

Studies 1-3 provide initial evidence of a minority-groups homogeneity effect. Across these studies, our homogeneity measure captured participants' reported assessments of the similarity of these groups on 1-7 rating scales. Might this effect emerge using a different method of eliciting perceptions of group homogeneity? To find out, we used a very different measure of perceived homogeneity in Study 4.

Study 4

To examine whether the minority-groups homogeneity effect would be manifest on a very different measure of perceived homogeneity, we asked participants to estimate the midrange of the distribution of scores among straight and LGBTQ individuals on various traits. Given the results of Study 3, we predicted that participants would estimate a tighter mid-range for members of the LGBTQ community than for heterosexual people.

Method

Participants. One hundred fifty heterosexual, cisgender participants in the U.S (67 women, 67 men, 16 did not provide their gender; mean age = 44.44) were recruited from Prolific. This sample size allowed us to detect an effect as small as d = 0.46 (two-tailed, independent samples t-test) with 80% power.

Procedure and materials. Participants completed a 3-minute survey about social groups in the United States after reading the following introductory text:

Psychologists have devised tests to measure people's traits and attitudes—how conventional/unconventional they are, how introverted/extraverted they are, how liberal/conservative they are, and so on. The study you are taking part in today is concerned with people's beliefs about how these traits and attitudes are distributed within certain groups in the U.S.

Imagine that the average person in the U.S. is somewhat helpful, scoring a 5.5 on a scale of 1 to 10 (from very unhelpful to very helpful). Now imagine that there is a range of scores that represents a majority of people in the U.S.—say, the middle 80% of people—in terms of how helpful they are. To capture the majority of people in the U.S., this range would have to be very wide, as there are some people who are very unhelpful, while others are very helpful. This range might be 2 to 9. On the other hand, there are groups of people in the U.S. who might have a narrower range in terms of how helpful they are. For example, if the average school teacher scores a 7.5 in terms of helpfulness, then a range that captures the majority of school teachers might be 6 to 9.

Participants were then randomly assigned to one of two conditions, which asked them to provide, for each of 6 traits, a mid-range for either: (a) heterosexual individuals (the majority group); or (b) LGBTQ individuals (minority groups of lesbian, gay, bisexual, transgender, and queer individuals). Specifically, participants were instructed:

In this study, we will ask you to think about how social groups score on different traits. For each trait, we will ask you to choose the range that you think represents the majority of people in a given group. The group we will ask you to think about for this study is [LGBTQ people (people who identify as lesbian, gay, bisexual, transgender, or queer) / heterosexual people (i.e., people who identify as straight)]. Please note that we are not asking you to think about capturing every single person, including the extremes, from this group (or else you might want to choose a range from 1-10 for every trait). Instead, we are asking you to think of a likely range that you think captures the majority (the middle 80%) of [LGBTQ/heterosexual] people for each specific trait.

Participants used sliders to select low-end and high-end estimates for each of six traits (helpfulness, valuing a sense of community, valuing personal success, openness to new experiences, extraversion, and religiosity), creating an 80% mid-range for their assigned group. Note that the stated mean on each trait was 5.5 (the midpoint of the scale) so that the ranges produced by participants would be more easily comparable across the six traits. For the trait of helpfulness, for example, participants read that:

Imagine that the average heterosexual person scores a 5.5 on a scale of 1 to 10 for how helpful they are. Please move the two sliders below to select the low and high ends of the range that would capture the majority (80%) of heterosexual people in terms of how helpful they are.

Participants' estimated ranges for the six traits were highly intercorrelated (Cronbach's alpha = 0.91), so we averaged them to create a composite measure of perceived variability. Study 4 was pre-registered on the Open Science Framework (https://osf.io/ar2cp/).

Results

A one-way ANOVA of participants' average mid-range estimates yielded a significant main effect of condition, F(1, 148) = 4.96, p = .027, Cohen's d = 0.36, with participants providing narrower mid-range estimates for LGBTQ people (M = 4.21, SD = 1.57) than for heterosexual people (M = 4.80, SD = 1.70). The minority-groups homogeneity effect is thus apparent not only when participants are directly asked about similarity, but when they are asked to specify the bulk of the distribution of scores on various traits for either the majority group or a collection of minorities.

Discussion

The results of Studies 1-4 indicate that majority group members tend to think that members of distinct minority groups in the United States—both in terms of race/ethnicity and sexual orientation/gender identity—are more similar to one another than the members of their own (majority) groups. This pattern of results may be due to factors related to the cultural context of the United States, in which minorities are often grouped together and described using umbrella labels (e.g, "people of color," "LGBTQ") which signal the common experiences of these groups. This grouping of minorities may lead majority group members to think about minority groups as having shared values and interests. On the other hand, this effect may be the result of more basic psychological processes that determine how people think about majority and minority groups generally, absent any day-to-day experience and outside of a familiar cultural context. Our next study examines this question.

Study 5

To tease apart these different perspectives on the results obtained in Studies 1-4, we examined perceptions of similarity of members of different groups in a fictional society. Inspired by a paradigm used in previous research (see Jetten et al., 2015), we exposed participants to non-diagnostic information about the actions of members of different groups in Bimboola, and then asked them to rate the similarity of members of either the different minority groups or the majority group in that fictional society. By using something of a minimal-group paradigm, we were able to assess whether the minority-groups homogeneity effect is unique to the cultural context of the United States, in which minority groups are thought to share many common beliefs and experiences, or whether it characterizes people's perceptions of minority groups generally, and even artificial groups.

Method

Participants. Two hundred and two participants (98 women, 101 men, 2 non-binary people, 1 other gender; mean age = 37.36; self-reported race and ethnicity: 58.9% White and non-Hispanic, 12.4% Black or African American, 11.4% Asian, 5.0% Hispanic or Latino, 12.4% Multiracial or another race/ethnicity) were recruited from Prolific. Participation was restricted to U.S. residents.

Procedure and materials. Participants were invited to complete a 4-minute survey about their impressions of others. Participants read the following prompt:

Imagine for the purpose of this study that you live in a fictitious society called Bimboola. You are a member of a group called the Ackians. Within Bimboola, there are several other groups of people called the Brites, the Cepians, the Drivians, and the Elies. Each of these groups has a unique set of beliefs and cultural practices – for example, the Brites and Cepians generally practice different religions. However, there is also similarity across the groups - a person from the Ackians and a person from the Elies might be more similar to each other than they are to the people from their own groups. People in Bimboola regularly interact with others from their own groups and with people outside of their groups. And although there are areas of Bimboola that are largely inhabited by Brites, Cepians, etc., people from all groups live in reasonable proximity to each other. Your group, the Ackians, are the majority group in Bimboola, making up over half of the population. All of the other groups are minority groups that together make up less than half of the population.

Participants then went through a brief learning phase that provided them with information on which they could later base their impressions of group similarity. We used a set of positive and negative statements from the literatures on impression formation and illusory correlations (see Ratliff & Nosek, 2010), presenting participants with fifteen statements about actions taken by individuals in these different groups—two positive statements and one negative statement about individuals in each of the five groups. For example, some participants read that, "An Ackian helped an elderly man who dropped some packages," and "A Drivian shoplifted an inexpensive item from a store." The statements were presented in randomized order, with the assignment of actions to different groups also randomized across participants (e.g., some participants read than an Ackian helped an elderly man and a Drivian shoplifted, whereas others read that a Drivian helped an elderly man and an Ackian shoplifted).

Participants were randomly assigned to one of two conditions, rating the similarity of: (a) members of "their own" majority group (the Ackians); or (b) members of the minority groups (the Brites, Cepians, Drivians, and Elies). In each condition, participants rated how similar members of their assigned group(s) are to one another on nine items: friendliness, selfishness, helpfulness, riskiness, morality, rudeness, similarity in general, and how much they value personal achievement and a sense of community. We selected these items because they were traits that could be judged or inferred based on the behaviors described in the learning phase (e.g., behaviors indicating how friendly someone is), whereas some items from the previous studies might not necessarily apply to these novel groups. Participants were asked to make these ratings with the following instructions:

In this set of questions, you will be asked to rate how similar [the Ackians (your group) / the minority groups in Bimboola (the Brites, the Cepians, the Drivians, and the Elies)]

are to one another. Please note that you will be asked to rate your general impression of how similar these group members are on average based on the information you have learned.

Responses to the similarity items were highly intercorrelated (Cronbach's alpha = 0.90), so we averaged them to create a composite score. Study 5 was pre-registered on the Open Science Framework (https://osf.io/3r2hx/).1

Results

A one-way ANOVA on participants' ratings of the similarity of members of their assigned group(s) yielded a significant main effect of condition, F(1, 200) = 10.08, p = .002, Cohen's d = 0.45, with participants who rated the minority groups in Bimboola providing significantly higher similarity ratings (M = 5.24, SD = 0.78) than those who rated the majority group (M = 4.84, SD = 1.01). Thus, even members of fictional minority groups are seen as more homogeneous than members of the majority.

Discussion

The results of Study 5 suggest that the minority-groups homogeneity effect can be observed even in a fictional context, indicating that it is not something limited to the cultural context of the U.S.—in which minorities tend to be grouped together under umbrella labels connoting their common experience—that gives rise to this effect. Instead, this pattern of results appears to be due to more fundamental cognitive processes that lead people to view members of different minority groups as sharing many similar traits or, stated differently, to view majority groups as being more diverse on these traits. Of course, participants in this study were from the

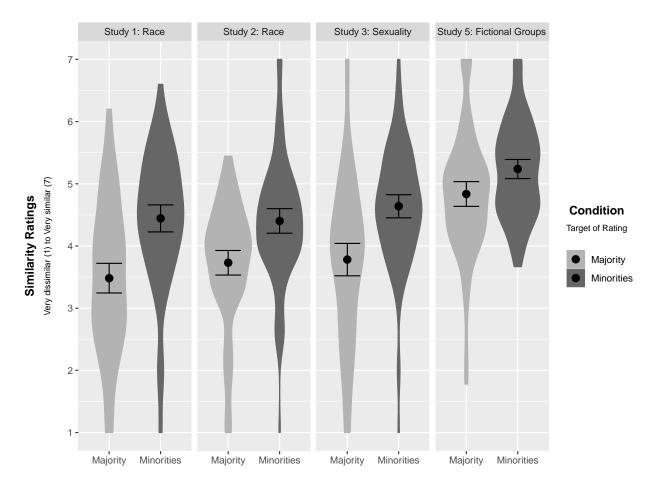
¹ At the time of pre-registering and running this study, we had only tested the effect among members of majority groups and referred to the pattern of results as the "outgroups homogeneity effect." As a result, in the pre-registration, the label "outgroup" corresponds to the minority groups and the label "ingroup" corresponds to the majority group.

United States, so it remains possible that they relied—consciously or unconsciously—on their knowledge of real majority and minority groups to answer questions about their impressions of these fictional groups. However, even if participants were using existing schemas, these data suggest that people have the propensity to apply current beliefs about minority groups to novel contexts, underscoring the potential breadth of this tendency.

In the studies reported thus far, we assessed perceptions of group homogeneity from the perspective (real or imagined) of majority group members (see Figure 1). Thus, it is unclear whether this pattern of results represents a *minority-groups* homogeneity effect or an *outgroups* homogeneity effect, because the minority groups in every case were also participants' outgroups. In an initial effort to shed light on this question, we ran a replication of Study 5, but with participants not asked to take the perspective of someone in the majority group. We obtained nearly identical results even when participants were led to adopt a bird's eye perspective on the different groups in Bimboola (see Supplementary Materials). This suggests that it is not necessary to conceive of the different minority groups as outgroups for them to be seen as relatively homogeneous. But to examine more deeply whether the results we've reported thus far represent a minority-groups homogeneity effect, not an outgroups effect, we next investigate whether members of different minority groups themselves perceive their groups to be relatively homogeneous.

Figure 1

The minority-groups homogeneity effect among majority group participants



Note: This figure shows the distribution of majority group participants' ratings of the similarity of majority group members vs. minority group members. Across all four studies (and a fifth not shown here because it involved a different measure of perceived similarity), participants rated members from sets of minority groups as more similar to one another than members of the majority group. The black dots and error bars represent mean values within each condition and 95% confidence intervals. The shapes show the distributions of responses within each condition. For clarity of presentation, we omitted the "individuated minority groups" conditions from the plot for Studies 1 and 2.

Study 6

To examine whether minority group members also think that members of different minority groups are more similar to one another than are members of the majority (such that the phenomenon can rightfully be called a minority-groups homogeneity effect), we revisited the context of racial and ethnic identity in the U.S. We recruited participants of color and White participants and measured their beliefs about the similarity of either people of color or White people.

Method

Participants. Four hundred participants (193 women, 200 men, 6 non-binary people, 1 other gender; mean age = 34.09) were recruited from Prolific. To ensure even representation between samples, we used Prolific's demographic screeners to recruit 200 White (monoracial) and non-Hispanic participants (self-reported race and ethnicity: 196 White and non-Hispanic, 3 White and another race, 1 did not report) and 200 participants of color (self-reported race and ethnicity: 62 Asian, 47 Black or African American, 33 Hispanic or Latino, 20 White and Hispanic or Latino, 20 selecting two or more races, 10 White non-Hispanic, 8 selecting another race). Participation was restricted to U.S. residents.

Procedure and materials. Participants were invited to complete a 3-minute survey about demographic groups in the United States and were randomly assigned to one of two conditions, which asked them to assess the similarity of members of the majority group in the U.S. (White people) or different minority groups (people of color). In each condition, participants rated how similar members of their assigned group(s) are to one another on the same nine traits and characteristics as in Studies 2 and 3 (e.g., helpfulness, openness to experience, religiosity):

In this set of questions, you will be asked to rate how similar [White people / people of color in the U.S. (that is, people who are Black, Native American, Asian American, Pacific Islander, Latino American, and Multiracial)] are to one other. As you make these ratings, consider the likely similarity of two randomly selected [White people / people of color]. Please note that you will be asked to rate your impression of how similar members of these groups are to each other on average, recognizing that members of all groups can be very different from one another.

Responses to the similarity items (Cronbach's alphas = 0.92 for White participants, 0.85 for participants of color) were averaged to create a composite score. Participants also completed the status threat measures from Studies 1 and 2.

Results

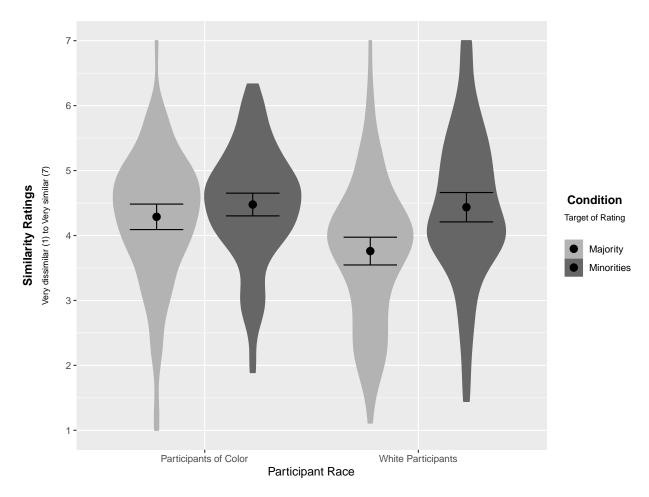
A 2 (condition: majority or minorities) x 2 (participant race: White or POC²) ANOVA of participants' composite similarity scores yielded a significant main effect of participant race, F(1, 396) = 13.21, p < .001, and a significant interaction between condition and participant race, F(1, 396) = 5.62, p = .018, but no significant main effect of condition. The main effect of participant race reflects the fact that participants of color rated the members of whatever group they were asked to assess as more similar (M = 4.38, SD = 0.94) than did White participants (M = 4.10, SD = 1.16). To examine the nature of the significant interaction, we computed the main effect of condition separately for White and POC participants. Among White participants, their average similarity ratings were significantly higher when they were rating members of the minority groups (M = 4.44, SD = 1.14) than when they were rating members of the majority (M = 4.44, SD = 1.14) than when they were rating members of the majority (M = 4.44, SD = 1.14) than when they were rating members of the majority (M = 4.44, SD = 1.14) than when they were rating members of the majority (M = 4.44, SD = 1.14) than when they were rating members of the majority (M = 4.44, SD = 1.44, SD = 1.44) than when they were rating members of the majority (M = 4.44, SD = 1.44, SD = 1.44, SD = 1.44) than when they were rating members of the majority (M = 4.44, SD = 1.44, SD = 1.44, SD = 1.44, SD = 1.44)

² As detailed in the participant demographics section, participants' self-reported race did not perfectly match the race information from Prolific's screening feature. We ran the analysis here using the race information from Prolific, but the results are the same when using participants' self-reported race.

3.76, SD = 1.08), F(1, 396) = 21.70, p < .001, Cohen's d = 0.61—replicating the minority-groups homogeneity effect documented in all of the previous studies. But among participants of color, there was no such effect, as their similarity ratings did not differ significantly whether they were rating members of the different minority groups (M = 4.48, SD = 0.88) or members of the majority (M = 4.29, SD = 0.99), F(1, 396) = 1.69, p = .19, Cohen's d = 0.20 (see Figure 2).

Figure 2

Ratings of the similarity of members of the majority group vs. members of the different minority groups on the part of participants of color and White participants



Note: This figure shows the distribution of similarity ratings of people of color and White people on the part of majority and minority participants. White participants rated people of color as significantly more similar to one another than White people are to one another, whereas participants of color did not.

We also computed the correlation between participants' ratings of the similarity of members of their target group(s) and their mean response to the questions about their beliefs about the future status of minorities in the U.S., separately for the White and POC samples. Among White participants, perceptions of the similarity of *majority* group members were positively correlated with the belief that minorities would soon have higher status in the U.S., r(98) = .32, p = .001, but their perceptions of the similarity of minority group members were not, r(98) = .11, p = .29. Among POC participants, perceptions of majority and minority similarity were not significantly correlated with this belief (majority: r(98) = .06, p = .54; minority: r(98) = .13, p = .22).

Discussion

As noted earlier, there is reason to believe that the minority-groups homogeneity effect would be stronger and more reliable on the part of majority group members than on the part of members of any of the minority groups. The fact that we observed such an effect among majority participants in all of our studies but not among participants of color in Study 6 is consistent with that supposition. Recall that for minority group members, the mechanism that we believe is most responsible for this effect—a sense that members of different minority groups have shared a common fate—is counteracted by the well-established outgroup homogeneity effect. That is, racial and ethnic minorities may be hard-pressed to rate members of different minorities as more similar to one another than members of the majority when they are so predisposed to think of the *majority* as homogeneous. Consistent with this idea, note that the difference between the responses of minority and majority participants in Study 6 was not in their assessments of the similarity of members of the different minority groups, but in their assessments of the majority.

At the same time, there may be certain minority groups for which the documented minority-groups homogeneity effect still holds on the part of those minorities themselves. For example, LGBTQ individuals may be more likely than people of color to believe that their collective subgroups have shared a common fate and, as a result, that they are more similar overall. We test this possibility in Study 7.

Study 7

We recruited both cisgender heterosexual participants and LGBTQ participants and assessed their perceptions of the similarity of either heterosexual people or LGBTQ people. Based on the studies presented thus far, we hypothesized that the minority-groups homogeneity effect may be driven by the belief that minority groups share a common fate, meaning that they have a shared history, a shared experience of being marginalized in society, and a shared investment in societal progress toward equality. As a first test of this proposed mechanism, we included a measure of belief in the common fate of minority groups to assess whether it correlates with perceptions of the similarity of these groups.

To further explore potential implications of the minority-groups homogeneity effect, we also added two new measures: 1) a measure of perceived social progress, to capture the extent to which people believe that there has been progress in the U.S. regarding the acceptance of LGBTQ people; and 2) a measure of support for public policies related to LGBTQ people. We were particularly interested in whether perceptions of minority groups as homogeneous are related to beliefs about the status and treatment of minority groups in society. For example, consider a straight, cisgender person who believes that LGBTQ people are a rather homogeneous group. This person might be more likely to feel concerned about the rising number of LGBTQ people in society and therefore overestimate the extent to which societal progress has already

been made toward LGBTQ equality. They may in turn be less likely to support policies that grant additional rights to LGBTQ people. The inclusion of these measures allows us to test whether perceptions of homogeneity, especially among majority group members, are associated with attitudes toward minority groups in society.

Method

Participants. Three hundred ninety-eight participants (186 women, 181 men, 14 non-binary or genderqueer, 17 other gender; mean age = 35.90) were recruited from Prolific. To ensure even representation between samples, we used Prolific's demographic screeners to recruit 200 heterosexual, cisgender participants (self-reported sexual orientation and gender identity: 97% heterosexual; 99.5% cisgender; self-reported race: 76.5% White and non-Hispanic, 9.0% Black or African American, 6.5% selecting two or more races, 4.5% Asian, 3.5% selecting another race) and 198 participants who were members of the LGBTQ community (self-reported sexual orientation and gender identity: 32.8% bisexual, 12.6% gay, 11.6% heterosexual, 8.6% pansexual, 34.3% another sexual orientation; 83.3% cisgender, 16.7% transgender; self-reported race: 64.1% White and non-Hispanic, 11.6% selecting two or more races, 10.6% Hispanic or Latino, 7.1% Black or African American, 6.6% Asian). Participation was restricted to U.S. residents.

Procedure and materials. The procedure in this study was nearly identical to that of Study 3. Participants were randomly assigned to rate the similarity of either heterosexual or

³ Participants reported their sexual orientation by selecting the checkbox(es) that best represented their identity. We summarize these data here by reporting the percentages for the largest categories and aggregating the remaining responses into "another sexual orientation." Participants reported their gender identity (here, referring to their identification as cisgender or transgender) by selecting whether or not they identify as transgender. There were some differences between Prolific's demographic data and participants' self-reported identities (resulting in some self-reported LGBTQ participants in the cisgender, heterosexual sample, and vice versa). We ran an additional analysis using participants' self-reported identities and the results were the same, so we report results here using Prolific's demographic markers.

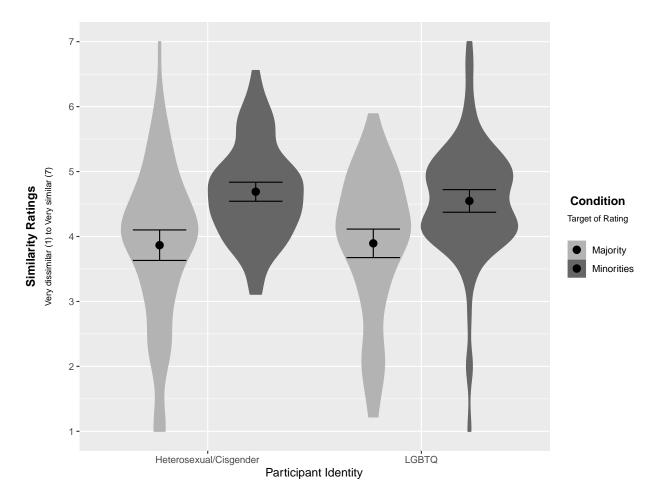
LGBTQ people on nine traits and characteristics (e.g., helpfulness, openness to experience, religiosity). After completing the similarity measure, participants rated the extent to which they thought the different groups in the LGBTO community share a common fate on four items: 1) "A gain for one group in the LGBTQ community is a gain for all groups in the LGBTQ community," 2) "LGBTQ people generally share the experience of being marginalized in society," 3) "Generally speaking, LGBTQ people share a common history," and 4) "Generally speaking, LGBTQ people have similar experiences in the world" (Cronbach's alpha = 0.79). Participants then indicated the extent to which they thought there had been societal progress for LGBTQ people on four items: 1) "Over the last several decades, conditions in U.S. society have improved significantly for LGBTQ people," 2) "Over the last several decades, there has been significant progress toward social equality for LGBTQ people," 3) "People in U.S. society are generally accepting of LGBTQ people," and 4) "U.S. institutions, like professional sports teams and the military, are generally friendly toward LGBTQ people" (Cronbach's alpha = 0.77). All responses on these two sets of measures (perceived common fate and perceived progress on LGBTQ issues) were made on 7-point scales with endpoints labeled (1) Strongly disagree and (7) Strongly agree.⁴ Responses to the individual items for each measure were averaged to create composite scores.

Results

⁴ Participants also answered 4 questions designed to measure their support for various pro- and anti-LGBTQ policies, but we have reason to believe that participants were confused by the different questions, with the result that the items did not tap what we intended to measure. More specifically, two questions dealt with pro-LGBTQ policies ("protecting same-sex marriage" and "protecting access to hormone therapy for transgender people") and two dealt with anti-LGBTQ policies ("passing legislation to outlaw teaching of LGBTQ issues and history in schools" and "passing religious exemption laws...that allow businesses to refuse service to LGBTQ people"). Surprisingly, scores on the two pro-LGBTQ questions were positively correlated with scores on the two anti-LGBTQ questions, making it hard to know what to make of a composite index of participants' responses and raising the possibility that more than a few participants were confused by the questions. As a result, we thought it best not to analyze participants' responses to these questions (although interested readers can access those data on the Open Science Framework).

A 2 (condition: majority or minority) x 2 (participant identity: LGBTQ vs. non-LGBTQ) ANOVA of the composite similarity scores yielded a significant main effect of condition, F(1, 394) = 34.29, p < .001, but no main effect of participant identity, F(1, 394) = 0.04, p = .84, and no interaction, F(1, 394) = 0.73, p = .39. Across both LGBTQ and non-LGBTQ samples, similarity scores were higher when participants rated the similarity of members of the different LGBTQ minority groups (M = 4.62, SD = 0.81) than when they rated the similarity of members the majority group (M = 3.88, SD = 1.15), t(394) = 7.41, p < .001, Cohen's d = 0.74. These data thus constitute evidence of a minority-groups homogeneity effect among minority participants as well as those in the majority (see Figure 3). This effect, furthermore, was evident on nearly all 9 items of the perceived similarity measure (Figure 4).

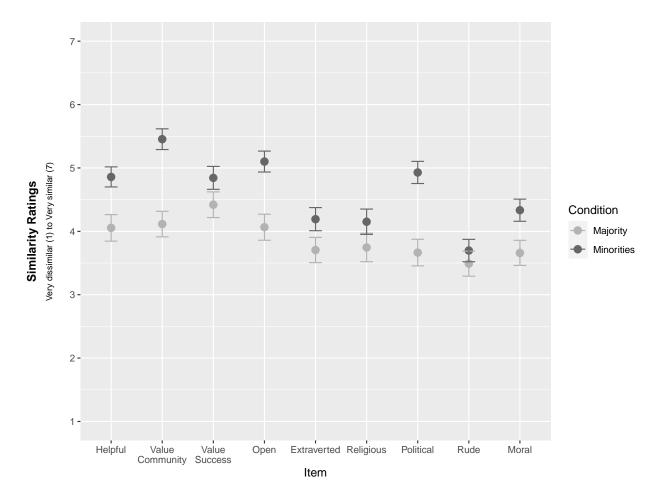
Figure 3
Similarity ratings of the majority group and (LGBTQ) minority groups on the part of non-LGBTQ and LGBTQ individuals.



Note: This figure shows the distribution of similarity ratings of LGBTQ individuals (minorities) and heterosexual individuals (majority) on the part of heterosexual/cisgender and LGBTQ participants. LGBTQ and non-LGBTQ participants alike rated LGBTQ individuals as more similar to one another than heterosexual individuals are to one another.

Figure 4

Similarity ratings of the majority group and (LGBTQ) minority groups on the part of non-LGBTQ and LGBTQ individuals for each item in the similarity measure.



Note: This figure shows the distribution of similarity ratings of LGBTQ individuals (minorities) and heterosexual individuals (majority) on the part of heterosexual/cisgender and LGBTQ participants for each item of the similarity measure.

We then calculated the correlation, separately for LGBTQ and non-LGBTQ participants, between perceived minority similarity and perceived common fate of the different LGBTQ subgroups. Participants who expressed a greater belief in the common fate of LGBTQ people also thought that members of the LGBTQ community were more similar to one another, both among LGBTQ participants, r(98) = .42, p < .001, and non-LGBTQ participants, r(96) = .40, p < .001. We also compared belief in the common fate of LGBTQ people between the two samples, and found that LGBTQ participants were more likely to believe in the common fate of LGBTQ people (M = 5.21, SD = 1.07) than non-LGBTQ participants were (M = 4.99, SD = 0.96), t(396) = 2.25, p = .025, Cohen's d = .23.

Finally, we calculated the correlation between perceived minority similarity and perceived societal progress for LGBTQ people and failed to find a significant correlation either among LGBTQ participants, r(98) = .03, p = .79, or non-LGBTQ participants, r(96) = -.01, p = .95. We also compared perceptions of societal progress for LGBTQ people between the two samples, finding that LGBTQ participants thought that less progress has been made toward LGBTQ equality (M = 4.74, SD = 1.00) than non-LGBTQ participants did (M = 4.96, SD = 0.89), t(396) = -2.31, p = .021, Cohen's d = .23.

Discussion

Across Studies 6 and 7, we found that LGBTQ people exhibit the same minority-groups homogeneity effect as their majority-group counterparts, but people of color do not. These data provide initial evidence that the minority-groups homogeneity effect may extend beyond majority group members, although it may not be universal among all minority groups and all social contexts. One possible reason for the difference we observed in these two studies is that

members of various racial and ethnic minority groups in the U.S. may be less likely to believe, given some very notable differences in their histories and contemporary experiences, that they share a common fate. LGBTQ people, in contrast, may feel a greater sense of common fate with one another, having histories and social movements that are much more closely intertwined. Indeed, in a separate survey, we asked people of color to rate the extent to which their respective subgroups shared a common fate, on two of the four items from the common fate measure described above (see Supplementary Materials). Those ratings were significantly lower (M = 4.47) than the mean ratings on the same two items made by the LGBTQ participants in Study 7 (M = 5.21), t(296) = 4.90, p < .001, Cohen's d = 0.60. Thus, it may be that members of minority groups that have a sense of shared history with one another will exhibit this minority-groups homogeneity effect, whereas groups that lack that sense will not.

Study 8

We have obtained consistent evidence for the minority-groups homogeneity effect among majority participants in all of our studies but inconsistent evidence among minority participants. To explore the basis of this pattern, we conducted the following study, which had two aims. First, we wanted to see whether other minority group participants, beyond LGBTQ individuals, would also exhibit the minority-groups homogeneity effect. We did so by asking respondents about the homogeneity of individuals from the countries within the United Kingdom: England vs. the three "minority" countries of Scotland, Wales, and Northern Ireland. Of course, England is a more ethnically diverse country than Scotland, Wales, or Northern Ireland, so any observed minority-groups homogeneity effect on the part of any participants may simply reflect their knowledge of that basic demographic fact. The more important aim of this study, then, was to test the proposed underlying mechanism: Would the minority-groups homogeneity effect on the

part of Scottish, Welsh, and Northern Irish participants, if observed, be tied to a belief that the populations of the minority countries of the U.K. share a common fate?

Method

Participants. Two hundred participants (99 women, 99 men, 2 non-binary people; mean age = 43.55) were recruited from Prolific. To ensure equal representation between samples, we used Prolific's demographic screeners to recruit 100 participants with English nationality and 100 participants with Scottish, Welsh, or Northern Irish nationality. Participation was restricted to U.K. residents.

Procedure. Participants read the following text describing the four countries of the United Kingdom:

The United Kingdom (U.K.) is made up of England, Scotland, Wales, and Northern Ireland. The population of England (as of 2019) is 56,286,961, with the English making up 84% of the U.K. population. The populations of Scotland, Wales, and Northern Ireland together make up the remaining 16% of the U.K. population.

Participants were then randomly assigned to answer questions about the similarity of either English people (majority condition) or Scottish, Welsh, and Northern Irish people (minorities condition) on the nine characteristics used in the previous studies (e.g., helpfulness, openness to experience, religiosity) following these instructions:

In this set of questions, you will be asked to rate how similar [people living in England are to one another / people living in Scotland, Wales, and Northern Ireland are to one another (that is, how similar they are, on average, to other members of their own group and to members of the other groups)]. As you make these ratings, consider the likely similarity of two randomly selected [English people / people from within and across these

three countries]. Please note that you will be asked to rate your impression of how similar members of these groups are to each other on average, recognizing that members of all groups can be very different from one another.

After responding to the similarity items, participants then rated their belief in the common fate of people from Scotland, Wales, and Northern Ireland using two items, modified from Study 7: 1) "People from Scotland, Wales, and Northern Ireland generally share a common history," and 2) "People from Scotland, Wales, and Northern Ireland generally have similar experiences in the world" (Cronbach's alpha = 0.74). Study 8 was pre-registered on the Open Science Framework (https://osf.io/au3te/).

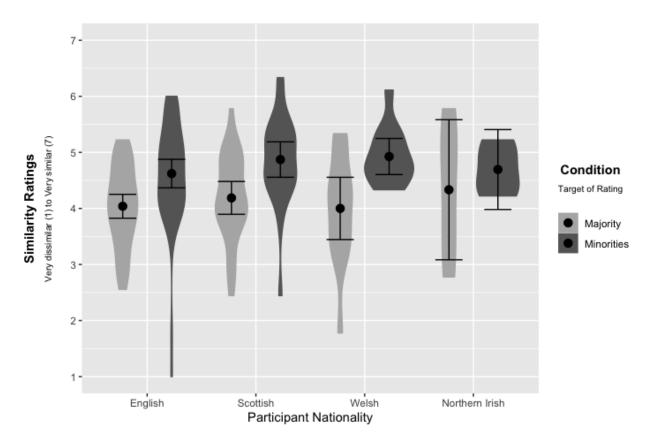
Results

A 2 (condition: majority or minorities) x 2 (participant nationality: English vs. non-English) ANOVA of the composite similarity scores yielded a significant main effect of condition, F(1, 196) = 12.97, p < .001, but no main effect of participant nationality, F(1, 196) = 0.69, p = .41, and no interaction, F(1, 196) = 0.16, p = .69. Across both English and non-English samples, similarity scores were higher when participants rated the similarity of people from the minority U.K. countries (M = 4.73, SD = 0.82) than when they rated the similarity of people from England (M = 4.11, SD = 0.80), t(196) = 5.50, p < .001, Cohen's d = 0.76. These data thus provide additional evidence of a minority-groups homogeneity effect among minority participants as well as those in the majority (see Figure 5).

As noted earlier, England is more ethnically and racially diverse than Scotland, Wales, or Northern Ireland, and so the observed minority-groups homogeneity effect may derive simply from participants' awareness of that fact. But is the effect we observed tied to participants' belief in the common fate of the people in Scotland, Wales, and Northern Ireland, as our proposed

mechanism predicts? Among all participants, those who expressed a greater belief in the common fate of people from these three countries also thought that they were more similar to one another, r(99) = .56, p < .001. This significant correlation was observed among the English respondents, r(52) = .54, p < .001, and, critically, among the Welsh, Scottish, and Northern Irish participants, r(45) = .58, p < .001. Thus, whether or not minority participants are likely to exhibit a minority-groups homogeneity effect appears to be associated with whether they see their own group as sharing a common fate with other minorities.

Figure 5
Similarity ratings of the majority country vs. the minority countries in the United Kingdom, broken down by participant nationality



Note: This figure shows the distribution of similarity ratings of English people (majority) and Scottish, Welsh, and Northern Irish people (minorities) on the part of each group of participants—English and non-English (Scottish, Welsh, and Northern Irish). Participants from all countries rated people from the minority countries in the U.K. as more similar to one another than people from England.

Study 9

To further probe the impact of beliefs about the common fate of different minority groups, we manipulated participants' beliefs about the common fate of those groups and examined whether doing so influenced the magnitude of the minority-groups homogeneity effect. We hypothesized that participants who were led to believe that members of different minority groups shared a common fate would rate them as more similar than those who were led to believe that the minority groups in question had very different experiences. As a secondary hypothesis, we expected that minority groups who are thought to share a common fate would be rated as more similar than the majority group, but that minority groups who are not thought to share a common fate would not be rated as more similar than the majority group.

Participants. Four hundred and fifty U.S. participants (222 women, 221 men, 6 non-binary people, 1 other gender; mean age = 38.19) were recruited from Prolific. This sample size allowed us to detect an effect as small as d = 0.29 (two-tailed, independent samples t-test) with 80% power.

Procedure and materials. Participants were invited to complete a 4-minute survey about social groups. They read about the fictional society of Bimboola, as in Study 5, but without being asked to imagine themselves as members of any of the specified groups. Participants were randomly assigned to one of three conditions. In the majority condition, participants were given some basic information about the groups in Bimboola and their broad similarities and differences from one another, before being asked to rate the similarity of members of the majority group:

Each of these groups has a unique set of beliefs and cultural practices – for example, the Brites and Cepians generally practice different religions. However, there is also similarity across the groups – a person from the Ackians and a person from the Elies

might be more similar to each other than they are to the people from their own groups.

People in Bimboola regularly interact with others from their own groups and with people outside of their groups. And although there are areas of Bimboola that are largely inhabited by Brites, Cepians, etc., people from all groups live in reasonable proximity to each other.

In the "common fate" condition, participants were given some additional information emphasizing the common fate (i.e., shared history and status) of the minority groups in Bimboola before rating the similarity of members of these minority groups:

The minority groups share a similar history in terms of how they arrived in modern Bimboola and what their current circumstances are like – a history unlike that of the majority Ackians. The Cepians were the first group to arrive in Bimboola, and the Brites, Drivians, and Elies immigrated to Bimboola very soon afterwards. Forty years later, the Ackians brutally took over, colonized Bimboola, and became the largest and most powerful group, with the various minority groups having less political and economic power, and less cultural influence.

In the "non-common fate" condition, participants were also given additional information, but the information emphasized the unique histories and status of the minority groups in Bimboola:

Each of the minority groups has a different history in terms of how they arrived in modern Bimboola and what their current circumstances are like. The Cepians were the first group to arrive in Bimboola, and the Drivians and Ackians immigrated there at different times afterwards. Forty years later than that, the Brites arrived, moving from a nearby area, and they are the most insular group in Bimboola (keeping largely to themselves). The Elies came to Bimboola more recently as refugees from a society further

away. Although the Drivians are a minority in Bimboola, they tend to be wealthy and to occupy positions of economic and cultural influence. The Ackians and Brites are moderately well-off in terms of status, whereas the Cepians make up something of a working middle class. The Elies, given their status as refugees, are the worst off economically.

From that point on, the procedure was the same as in Study 5. Participants went through a learning phase in which they read descriptions of (non-diagnostic) actions taken by members of the different groups in Bimboola. Participants then rated the similarity of either the minority groups or the majority group, using the same items as in the earlier studies. Participants were also asked to complete a single-item manipulation check, rating their agreement with the statement: "The minority groups in Bimboola share a common fate (i.e., a gain for one of the minority groups is a gain for all of the minority groups)" on a 7-point scale, with endpoints labelled (1) *Strongly disagree* and (7) *Strongly agree*. Study 9 was pre-registered on the Open Science Framework (https://osf.io/27k56/).

Results

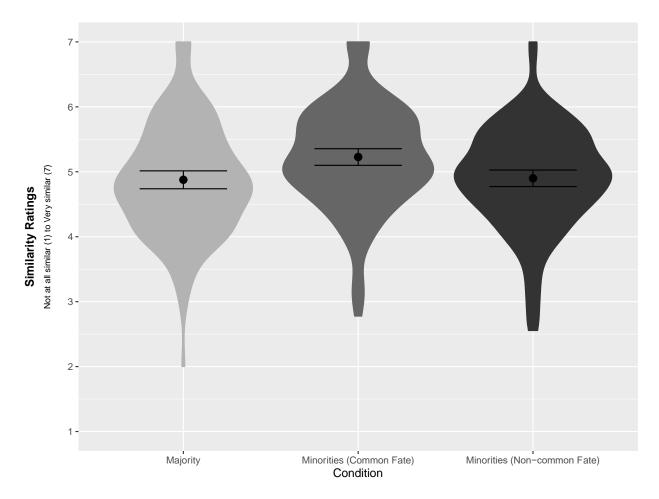
Manipulation check. A one-way ANOVA of the manipulation-check ratings yielded a significant main effect of experimental condition, F(2, 447) = 8.45, p < .001, $\eta_p^2 = 0.036$, which validated the effectiveness of our manipulation. A series of pairwise comparisons further revealed that participants in the common fate condition (M = 5.14, SD = 1.25) thought the minorities shared significantly more of a common fate than those in the non-common fate condition (M = 4.50, SD = 1.48), t(447) = 4.05, p < .001, and those in the majority condition (M = 4.73, SD = 1.34), t(447) = 2.63, p = .02. The latter two conditions did not differ significantly from each other, t(447) = 1.42, p = .33.

Similarity ratings. A one-way ANOVA of the mean ratings of the similarity of members of the target group yielded a significant main effect of condition, F(2, 447) = 8.82, p < .001, $\eta_p^2 =$ 0.038. As hypothesized, participants in the common fate condition (M = 5.23, SD = 0.80) rated members of the minority groups as significantly more similar than did participants in the noncommon fate condition (M = 4.90, SD = 0.78), t(447) = 3.49, p = .002 (see Figure 6). Our secondary hypothesis was also supported: Participants in the common fate condition thought that the members of the different minority groups were more similar to one another than those in the majority (or control) condition thought members of the majority group were (M = 4.88, SD =0.86), t(447) = 3.75, p < .001—a replication of the minority group homogeneity effect. But that was not the case for participants in the non-common fate condition, whose ratings of the similarity of the different minority groups did not differ from the ratings of the majority group on the part of participants in the majority (control) condition (M = 4.88, SD = 0.86), t(447) = -0.25, p = .97. These results thus provide direct, experimental support for the causal role of perceptions of common fate among different minority groups in driving the minority-groups homogeneity effect.

⁵ We observed the same difference between the common-fate and non-common fate conditions (p = .018) in an earlier study with slightly different text for the common/non-common fate manipulation and a more complicated experimental design. A detailed description of that study can be found in the Supplementary Materials.

Figure 6

Ratings of the similarity of the target group, by experimental condition



Note: This figure shows the distribution of similarity ratings in the majority (control) condition, common fate condition, and non-common fate condition. Participants rated the minority groups as more similar than the majority group only when they learned that the minority groups shared a common fate.

Internal Meta-Analysis

The studies described in this paper involve investigations of the minority-groups homogeneity effect among both majority and minority group participants. To determine the average effect size of the minority-groups homogeneity effect, we conducted an internal meta-analysis of the results of all studies in this paper, separately for participants from majority and minority groups.

First, we collected the effect sizes from Studies 1-8, all of which tested the minority-groups homogeneity effect on the part of majority group members—in the contexts of race/ethnicity, sexual orientation, nationality, and fictional groups. We meta-analyzed the effect sizes (Cohen's d) for comparisons between participants' assessments of the homogeneity of members of the majority group vs. members of the minority groups (N = 1,453), all of which were statistically significant. We excluded the comparisons involving the individuated minority groups conditions from Studies 1 and 2. We then calculated a weighted average of these eight effect sizes using a template from Goh et al. (2016). Averaging across these studies, the effect size for the minority-groups homogeneity effect corresponded to Cohen's d of .65, 95% CI [.55, .76], z = 12.11, p < .001, with majority group participants reliably rating members of different minority groups as more similar than members of the majority group.

We then collected the effect sizes from Studies 6-8, which tested the minority-groups homogeneity effect on the part of minority group members—in the contexts of race/ethnicity, sexual orientation, and nationality. We meta-analyzed effect sizes (Cohen's d) for comparisons between minority group members' ratings of the similarity of members of the majority group vs. members of different minority groups (N = 498), two of which were statistically significant and one of which was not. Averaging across these studies, the effect size for the minority-groups

homogeneity effect corresponded to Cohen's d of .51, 95% CI [.33, .69], z = 5.57, p < .001, with minority group participants on average rating members of minority groups as more similar than members of the majority group. It is important to note, however, that the mean value of d = .51 masks quite a bit of variability, from a range of d = .20 for participants of color in Study 6, to d = .87 for minority U.K. participants in Study 8. We return to this issue in the General Discussion.

General Discussion

The nine studies reported here, along with four additional studies in the supplementary materials, provide reliable evidence of a novel phenomenon we've referred to as the *minority-groups homogeneity effect*, by which people tend to rate members of different minority groups as more similar to one another than members of the most relevant majority group. Across these studies, we found that members of majority groups (White people, heterosexual people, people from England, and people imagining themselves as members of a fictional majority group), as well as members of some minority groups (LGBTQ people and people from the minority U.K. countries, but not people of color in the U.S.) exhibit this pattern.

Why might people consider members of different minority groups to be more similar than members of the corresponding majority group? We found that the belief that minority group members share a common fate is an important driver of the perception of minority groups as more similar to one another. Participants who endorsed a belief in the common fate of different minority groups were more likely to rate them as similar, a pattern that helps explain why we observed a minority-groups homogeneity effect among some but not all minority respondents. That is, as noted earlier, participants of color in the U.S. thought that their respective subgroups shared less of a common fate compared to LGBTQ participants (see Study 7 and Supplementary Materials) and compared to participants from the minority countries in the United Kingdom

(Study 8). The significant correlations between the ratings of common fate and perceived similarity of the minority groups in Studies 7 and 8 (.42 for LGBTQ participants and .58 for respondents from the U.K. countries) also supports the role of perceived common fate in the minority-groups homogeneity effect. Critically, we also found that experimentally manipulating participants' belief in the common fate of different minorities led to predictable changes in their beliefs about minority similarity (Study 9).

Additional Mechanisms and Boundary Conditions

In addition to the evidence we presented regarding the role of beliefs in the common fate of various minorities, there may be other mechanisms that contribute to this effect. For example, participants might call to mind different types of information when thinking about members of the majority group than when thinking about members of multiple minority groups. When thinking about multiple minority groups, precisely because they represent several different groups, one may be more likely to think in terms of higher-level categories (e.g., stereotypes, group-level traits), and thus focus more on abstract similarities between the groups. But when thinking about members of the majority, one may be more likely to think about individual people and more detailed features, which can have the effect of making differences more salient. A greater focus on more detailed features when thinking about majority group members might result both from people personally knowing a greater number of majority group members and because majority group members are better represented in media. This hypothesized difference in the abstractness and concreteness with which one thinks about minority and majority group members may work in tandem with what we have shown about the effect of beliefs about the common fate of members of different minority groups: that is, thinking about minority groups at

a more abstract level may foster a sense that they are more entitative and thus share more features in common (Dasgupta et al., 1999).

Another contributor to the minority-groups homogeneity effect may be the recognition that members of larger groups tend to span a wider range on various traits, leading people to assume that they differ as well on other measures of variability. This would represent an instance of Kahneman & Frederick's (2002) attribute substitution: Computing the variance or standard deviation of a group is hard, but computing the range is easy, so people substitute the latter for the former, without being aware of doing so. For example, when thinking about larger groups, people may have a relatively easy time thinking of individuals who are very different from each other, resulting in a sense that these groups have greater variability.

Although we have uncovered evidence of a robust minority-groups homogeneity effect, are there contexts beyond those examined here in which this effect is unlikely to be observed? Note that we examined this effect in the context of people's perceptions of minority groups that are not only that—minorities, or the smaller groups in society—but also ones that share histories of marginalization. Thus, given that this is so often true in the world at large, our paradigms conflate group size and group status. Would the minority-groups homogeneity effect also apply when the minority groups, or some of them, are high-status (e.g., in South Africa, where the minority White population has historically had the highest status and the most power)? Or when the numerous minority groups have very different experiences (e.g., in China, where there are 55 recognized ethnic minority groups)? We would expect less of a minority-groups homogeneity effect in these contexts, given our findings about the role of beliefs in the common fate of different minority groups in producing this effect.

Also, in all of our studies, we examined beliefs about minority group similarity along a single dimension of identity (e.g., race, nationality, or sexual orientation). We did so to track how people so often think about different groups in their daily lives, with racial minorities, sexual minorities, and other types of minorities each representing common, distinct categories. Might this effect also be observed in beliefs about minority groups spanning *different* dimensions of identity (e.g., asking participants to consider the similarity of Muslims, Asian Americans, and bisexual people; or the elderly, Native Americans, and non-binary people)? Again, given the influence of beliefs about common fate that we have documented, we suspect that the minority-groups homogeneity effect would be more likely to be observed for minority groups that vary along a common identity dimension rather than along different identity dimensions, unless the latter are also thought to share a common experience or struggle.

Consequences of the Minority-Groups Homogeneity Effect

We began this research interested in whether the belief that members of different minority groups are similar to one another might accentuate majority group members' concerns about changing demographics (Craig & Richeson, 2014; Stefaniak & Wohl, 2022). If different minority groups are seen as similar to one another, it is easier to imagine them working together to achieve common political goals, fueling fears about their projected population growth. We obtained only weak evidence for that hypothesis, however, mostly in the form of modest correlations between perceptions of minority similarity and feelings of group status threat among White participants.

Of course, it may be that susceptibility to the minority-groups homogeneity effect is indeed linked to fears about demographic changes and minority advancement, but the measures we have used do not adequately tap that relationship. It may be, for example, that people who

think that members of different minority groups are very similar to one another might be more prone to explicitly-stated zero-sum propositions that resource gains for minorities will result in losses for the majority. People who view minority groups as more similar may also be less likely to recognize the distinct disparities that affect different minority groups, leading them to be less supportive of social policies that address unique needs of different groups (e.g., reparations for American descendants of slavery) relative to policies that might help all minority group members or even all people in general (e.g., universal basic income).

Alternatively, our failure to find more than weak evidence of a link between the minority-groups homogeneity effect and concerns about minority advancement may be because the former can cut two ways. The minority-groups homogeneity effect may indeed raise alarm in some participants. For others, however, it may lead to a *recognition* of social inequality and to *positive* attitudes toward minority group members and policies designed to reduce inequality. Majority group members who see various minorities as similar to one another and as sharing a common fate may consider the disadvantages they have faced as more substantial.

There may be noteworthy implications of the minority-groups homogeneity effect on the part of minority group members as well. We have shown that minority group members who believe that they and other minority groups share a common fate are more likely to view members of different minority groups as similar to one another. It seems likely, then, that this would also lead to a greater sense of solidarity with members of other minority groups and a greater commitment to collective action aimed at addressing disadvantages suffered by any of them. Also, as with members of the majority, it may be that minority group members who perceive greater similarity among members of different minority groups are more likely to endorse zero-sum beliefs regarding their relationship with the majority—endorsing, for example,

the idea that as the majority group gains more resources, minority groups will fall further behind.

Additional research on the potential consequences of the minority-groups homogeneity effect,

among both majority and minority-group members, is thus warranted.

Limitations and Future Directions

It is commonplace to cite the limitations of research conducted exclusively with WEIRD participants, and this caution is particularly apt in this case because all of our data was obtained from the Prolific platform and included only participants from the U.S. and the U.K. It is unclear whether our findings would generalize to other cultural contexts, especially those in which the relevant categories of majority and minority may have different histories and structural relationships. Even though we found evidence of the minority-groups homogeneity effect in people's assessments of a fictional society, which suggests that the effect may be broadly generalizable, that result may mainly reflect the fact that the U.S.-based participants in those studies were simply applying their real-life experience with racial and ethnic categories when responding to questions about those fictional groups. As we have stressed repeatedly, we would not expect to find a robust minority-groups homogeneity effect when considering minority groups that are *not* seen as sharing a common fate, which would suggest that our results should generalize only to those contexts with similar relationships between majority and minorities, and similar relationships between different minority groups.

Second, when examining whether minority group members also exhibit a minority-groups homogeneity effect, we grouped different minority group respondents together. In doing so, we could not capture potential differences between members of various minority groups.

Members of minority groups can have vastly different experiences from one another and different degrees of solidarity or kinship with members of other minority groups. For example, in

Study 6, when participants who were members of different racial and ethnic minority groups were asked to consider the similarity of people of color or White people, they may or may not have identified strongly with the label "people of color," thus influencing their ratings of the similarity of that overarching group. Future research would benefit from recruiting larger samples of members of each minority group (e.g., Black Americans, Asian Americans) to potentially arrive at a more nuanced understanding of how members of these groups think about their similarity to other minority groups.

Finally, the methods used across these studies were largely the same, with participants rating the similarity of members of different groups on a standard set of traits or, in Study 4, with participants estimating the mid-range of the distribution of scores on those traits. To fully assess the robustness of this effect, it would be worthwhile to measure similarity in additional ways. Might the effect emerge on a rather different set of traits? Might it emerge on less explicit measures of perceived similarity? It's worth noting here that we also explored the minority-groups homogeneity effect in a follow-up study by asking participants about how different members of the majority and minority groups are to one another and obtained results consistent with what we've reported here. That is, respondents indicated that members of the various minority groups are less different from one another than members of the majority (Ni, Tepper, & Gilovich, unpublished data).

The studies presented here also only involved between-subjects designs, with participants considering the similarity of either the minority groups or the majority group. People might not necessarily report the same sense of similarity when asked to compare groups directly in a within-subjects design, although the consistent group-level effects across studies suggest that people think about these categories in meaningfully different ways.

Conclusion

People's perceptions of different social groups are complex, emerging from their interactions with members of different groups, from stereotypes they learn about others, and from their knowledge about the status and size of different groups. In this paper, we documented a phenomenon representing one element of these perceptions: how people view members of different majority and minority groups. Overall, people tend to view members of minority groups as more similar to one another than members of the majority are to one another. This robust effect emerges among various groups of respondents and across several different identity dimensions (race/ethnicity, sexual orientation, and nationality). Recognition of this tendency to view minorities as more homogeneous than the majority may contribute to a deeper understanding of intergroup dynamics, including perceptions of intergroup inequality, reactions to changing demographics, and support for equity-enhancing policies.

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