

Mere Membership in Racially Diverse Groups Reduces Conformity

Sarah E. Gaither*¹, Evan P. Apfelbaum*², Hannah J. Birnbaum³, Laura G. Babbitt⁴, & Samuel R.

Sommers⁴

Duke University¹, Massachusetts Institute of Technology², Kellogg School of Management³,

Tufts University⁴

Author Note

*The first two authors contributed equally to this work. Correspondence should be addressed to Sarah E. Gaither, Duke University, Department of Psychology & Neuroscience, 417 Chapel Dr, Box 90086, Durham, NC 27708-0086, email: sarah.gaither@duke.edu, or to Evan P. Apfelbaum, MIT Sloan School of Management, 100 Main Street, Cambridge, MA 02142, email: epa1@mit.edu

Abstract

Three studies assessed the impact of White individuals' mere membership in racially diverse or homogeneous groups on conformity. In Study 1, White participants were randomly assigned to four-person groups that were racially diverse or homogeneous in which three confederates routinely endorsed clearly inferior college applicants for admission. Participants in diverse groups were significantly less likely to conform than those in homogeneous groups. Study 2 replicated these results using an online conformity paradigm, thereby isolating the effects of racial group composition from concomitant social cues in face-to-face settings. Study 3 presented a third condition—a diverse group that included one other White member. Individuals conformed less in both types of diverse groups as compared with the homogeneous group. Evidence suggests this was because Whites in homogeneous (versus diverse) settings were more likely to reconsider their original decision after learning how other) group members responded.

Keywords: conformity, groups, decision-making, diversity, race

Conformity—the tendency for an individual to agree with a majority position—is often considered a universal group phenomenon (Bond & Smith, 1996; Cialdini & Goldstein, 2004; Hogg, Adelman, & Blagg, 2010). Conformity shapes decisions with implications for social justice, public policy, and innovation (Goncalo & Duguid, 2012; Janis, 1972; MacDonald, Nail, & Levy, 2004) and is central to explanations of various real world phenomena (e.g., Levine et al., 2014; Sacerdote, 2001). However, rates of conformity vary with group size, culture, ambiguity of the decision-making context, and motivation (Asch, 1951; 1956; Bond, 2005; Bond & Smith, 1996). Here, we investigate an unexplored, yet potentially powerful feature of a group’s composition that may influence conformity: racial diversity.

The extant psychological literature offers differing predictions regarding how the diversity of a group will impact an individual’s propensity to conform. Research on social influence suggests that individuals will conform more in racially homogeneous than diverse groups, because people tend to be influenced more by similar versus different others (Brock, 1965; Latané, 1981), by ingroup versus outgroup members (Abrams & Hogg, 1990; Levine, Cassidy, Brazier, & Reicher, 2002; Mackie, Worth, & Asuncion, 1990; Platow et al., 2005), and by individuals with whom they more strongly identify (Siegel & Siegel, 1957; Turner, 1982). For example, Levine and colleagues (2002) demonstrated that when bystanders shared a common category membership (i.e., had the same university affiliation), they were more likely to intervene in a violent situation.

Two forms of social influence—normative and informational—could explain why individuals conform more in racially homogeneous than diverse groups. Normative influence would suggest that this tendency stems from individuals’ greater concern with belonging and social acceptance in homogenous group settings. Informational influence would suggest that

individuals give more weight to others' opinions in homogeneous versus diverse group settings because they are more inclined to trust the judgment of similar others (Brewer, 1998; Hogg, 2007; Pettigrew & Tropp, 2011). Accordingly, informational influence would predict that when it becomes clear to individuals in a homogeneous group that others support a potentially questionable decision, they will more carefully consider the decision's merits than they would in a diverse group.

In contrast to the theorizing above, a stream of research on attribution theory suggests that individuals may conform more in racially diverse than homogeneous groups. This research predicts that because people *expect* to agree more with similar than different others, when consensus begins to emerge in a racially diverse group, it should be particularly influential (i.e., if a group like *this* is converging on agreement, there must be something persuasive about this particular decision; Goethals, 1972; Goethals & Nelson, 1973; Orive, 1988). For example, Goethals (1972) found that individuals became more confident in their decision when a dissimilar (versus similar) person agreed with them. Thus, witnessing a sequence of group members from different racial backgrounds support the same decision may be a particularly compelling impetus for individuals to conform.

In addition to determining which of these competing predictions is supported, assessing the relationship between racial diversity and conformity is theoretically important because research to date has primarily focused on how diversity affects downstream communication processes (e.g., Phillips, Mannix, Neale, & Gruenfeld, 2004; Richeson & Sommers, 2016). However, the influence of diversity may emerge even before communication begins—before students have their first discussion, a meeting is called to order, or a jury starts deliberations. Although it is clear that simply taking note of the composition of the group has the potential to

influence expectations about agreement (Apfelbaum, Phillips, & Richeson, 2014), whether *mere membership* in racially diverse versus homogeneous groups influence individuals' propensity to conform remains unclear. We investigate this issue through a focus on White individuals—an aim that carries important practical implications for high-stakes matters in legal, governmental, and organizational arenas in which Whites formulate their decisions in contexts that often lack diversity.

Study 1

Closely following seminal conformity paradigms (e.g., Asch, 1951; 1956), we examine how White individuals' membership in racially diverse versus homogeneous groups affects their tendency to agree with a clearly inferior majority decision. We also examine evidence for normative influence (using a measure of group belonging concerns) and informational influence (using a measure of perceived group member competence). Finally, as an exploratory measure, we assessed whether Whites' explicit racial attitudes were associated with conformity (see OSM for items and analyses).

Participants and Design

We recruited 102 White undergraduates (60 female; $M_{\text{age}} = 18.66$, $SD = .92$) through the participant pool of a university in the Northeastern U.S. in exchange for credit. We randomly assigned participants to a racially diverse or homogeneous group. Given our design and the average weighted effect size in previous conformity research ($d = .92$, see Bond & Smith, 1996), we targeted 50 participants per condition.

Diversity manipulation. The homogeneous condition included three confederates: one White man and two White women. To capture a more ecologically valid operationalization of diversity than a conventional White-Black binary or minimal group paradigm, the diverse

condition included three confederates from different racial outgroups who were all students from the same university: one Black man, one South Asian woman, and one East Asian woman. We employed at least two different confederates of each gender and racial background (e.g., two different Black men). Confederates were blind-to-hypotheses and trained to respond comparably across sessions. To preclude order effects, confederates' seating order was randomized.

Procedure

An experimenter positioned four seats around a table that faced a projector screen (see Online Supplemental Materials; OSM). One confederate was already seated when the participant arrived, and the other two confederates arrived, one at a time, 2-4 minutes later. The experimenter directed the actual participant to one of the end seats so that s/he would always be last to respond (mirroring Asch, 1956). The experimenter described the study as exploring whether the accuracy of college admissions decisions depends on the amount of information reviewers receive and explained that the group had been assigned to a minimal information condition to justify why they would later evaluate applicants based only on GPA, SAT scores, number of advanced placement classes, and extracurricular activities. The experimenter indicated that pairs of applicants would be projected side-by-side and that each participant, in seated order, would state which applicant s/he thought was admitted. Participants were not permitted to justify their choice but to simply respond "Number 1" or "Number 2" to indicate their selection.

The experimenter projected 12 pairs of applicants. The actual participant was always last to respond. Of the 12 pairs, eight were pretested applicant pairings (see OSM) in which one applicant was clearly stronger. For each of these eight trials, all three confederates selected the weaker applicant. Four of the 12 pairs were filler trials to minimize suspicion regarding the

study's purpose. On these trials, pairs of applicants were of virtually identical strength; one confederate selected one applicant and two confederates selected the other.

After the group task, the experimenter asked the participant to sit at the computer in the room and ostensibly led the other participants to additional computers located elsewhere. Participants completed post-task survey items, including a suspicion check. No participants indicated suspicion.

Dependent Measures

Manipulation checks. Using a 7-point scale (1 = *not at all*, 7 = *very much*), participants indicated their agreement with two statements that evaluated the effectiveness of our manipulation of group composition: "My group members were [similar to me; racially/ethnically diverse.]"

Conformity. We assessed the degree of conformity based on the number of experimental trials (out of eight) in which participants followed the confederates by selecting the weaker applicant.

Group belonging concerns. To assess the possibility of normative influence, we measured belonging concerns by averaging two items: "I was concerned about not fitting in with the other people in the group" and "I wanted the other people in the group to form a positive impression of me," both using a 7-point scale (1 = *not at all*, 7 = *very much*; $\alpha = .69$).

Perceived competence. To assess the possibility of informational influence, we measured perceived group member competence by averaging two items using the same scale: "The other group members were competent decision-makers" and "The other group members made quality decisions" ($\alpha = .80$).

Results

Manipulation Checks

Participants in the homogeneous condition perceived their group to be less racially diverse and more similar to themselves than participants in the diverse condition (all t s > 2.93 , all p s $< .01$, all r s $> .30$), indicating that the group composition manipulation was effective. Table 1 presents descriptive statistics and Table 2 presents correlations for Study 1 variables.

Conformity

Overall, 87% of participants conformed at least once during the study. Participants in the homogeneous condition ($M = 32.0\%$) conformed significantly more than participants in the diverse condition ($M = 20.0\%$), $t(100) = 3.16$, $p < .01$, $r = .30$, 95% CI = [.11, .46].

Group Belonging Concerns

There was no difference in belonging concerns between participants in homogeneous and diverse conditions, $t(85) = .88$, $p = .381$.

Perceived Competence

There was no difference in perceived competence of group members between participants in homogeneous and diverse conditions, $t(88) = 1.09$, $p = .28$.

TABLE 1
Study 1 Outcomes by Group Condition

Measure	Homogeneous <i>M (SD)</i>	Racially Diverse <i>M (SD)</i>
<i>Conformity</i>	32.0% (21.9)*	20.0% (13.7)
<i>Group belonging concerns</i>	3.26 (1.61)	2.97 (1.46)
<i>Perceived competence</i>	3.91 (1.35)	3.62 (1.18)

Manipulation Checks

¹ Survey responses were erroneously not recorded for 15 participants (seven in the diverse condition, eight in the homogenous condition) for some belonging and competence measures resulting in differing degrees of freedom.

<i>Perceived diversity</i>	1.49 (.81)*	6.15 (1.60)
<i>Perceived similarity</i>	3.86 (1.39)*	3.04 (1.25)

Note. * $p < .05$; all measures employed 1-7 scales (except conformity, which was a percentage).

TABLE 2
Correlations among Study 1 Variables

Variable	1	2	3	4
1. <i>Conformity</i>				
2. <i>Group belonging concerns</i>	.13			
3. <i>Perceived competence</i>	.13	.11		
4. <i>Perceived diversity</i>	-.26*	-.03	-.08	
5. <i>Perceived similarity</i>	.13	.05	.41***	-.33**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Discussion

Study 1 offers, to our knowledge, the first direct evidence that Whites conform more in racially homogeneous versus diverse group settings. This result is consistent with literatures on social influence, which suggest that individuals conform more in response to similar versus different others (e.g., Abrams & Hogg, 1990; Brock, 1965; Platow et al., 2005; Turner et al., 1989). However, the explanation for this effect was less clear. There were no differences between conditions in measures of normative influence (i.e., individuals' group belonging concerns) or informational influence (i.e., individuals' perceptions of their group members' competence).

Study 2

Study 2 sought to provide greater insight into *why* individuals may conform less in diverse than homogeneous group settings. First, to rule out concerns with group belonging (normative influence), which are often implicated in previous work, we reassessed this variable using different items than Study 1. Second, drawing on research on referent informational

influence (Turner, 1982; 1985), we measured two components of informational influence that may be particularly relevant to individuals' experience in homogenous versus diverse groups—group identification and trust in group members' judgments. It may be that a greater degree of identification with, or trust in, racial ingroup members drives Whites' propensity to conform in homogeneous versus diverse group settings (Brewer, 1998; Hogg, 2007; Pettigrew & Tropp, 2011).

Study 2 also assessed the external and internal validity of the conformity effect observed in Study 1. Regarding external validity, we examined whether the effect of diversity on conformity generalizes to a more representative community sample. Regarding internal validity, we experimentally isolated membership in a racially diverse or homogeneous group from the other social cues that emerge in face-to-face contexts by having participants complete a virtual group conformity paradigm. Virtual paradigms allow researchers to isolate key variables of interest (e.g., Kim, 2009; Laporte, van Nimwegen & Uyttendaele, 2010; Rosander, Eriksson, 2012; Smilowitz, Compton & Flint, 1998), yet still operate similarly to real-world groups (e.g., Dino, Reysen & Branscombe, 2008; McKenna, Green, & Gleason, 2002). This allowed us to more precisely test whether *mere membership* in racially diverse versus homogeneous groups— independent of any nonverbal cues—is sufficient to obtain the same effects.

Participants and Design

We recruited 124 White adults from a different university's participant pool in the Northeastern U.S. that draws community members for payment (\$8). We targeted a final sample of 50 participants per condition. During a funneled debriefing, 21 participants indicated that they did not believe their group members were real and were excluded (see OSM), leaving 103 participants (55 female; $M_{\text{age}} = 39.27$, $SD = 15.05$).

Procedure

An experimenter informed participants that they would complete a virtual group task with three other individuals participating in the same lab or at a collaborating institution, using the same cover story as Study 1. The experimenter “notified” the other lab that participants were ready to begin and after approximately 30 seconds received a prearranged text message that produced an audible chime. The experimenter then seated participants at individual computers.

Virtual conformity paradigm. Participants learned that they would be working with three other people on a college admissions decision task (in reality, these group members did not exist and their responses were programmed). Participants provided a small amount of information about themselves and were told that they would receive the same information about their group members. Participants answered three filler questions (gender, whether they were a college student, and what degree they hold/will receive) and then picked one avatar from an array that looked most like them. Participants were shown eight different avatars matched to participant gender: two White, two East Asian, two South Asian, and two Black (see OSM). After selecting an avatar, participants viewed all group members’ selections. Participants in the homogeneous condition viewed their avatar alongside three other White avatars, whereas participants in the racially diverse condition viewed their avatar alongside one Black, one South Asian, and one East Asian avatar (all matched to participant gender). Group members’ responses to the filler items were identical across conditions.

Next, participants (and ostensibly their group members) viewed consecutive pairs of applicant profiles and were instructed to select the strongest applicant from each pair. In random intervals of 2-11 seconds, each group member’s decision appeared below their avatar, indicating whom they selected. The actual participant always responded last. Participants completed the

same 12 trials as in Study 1 (eight target, four filler) with group members selecting the weaker applicant on target trials. Participants then completed a post-task survey and the experimenter conducted a two-part funneled debriefing to probe for suspicion.

Dependent Measures

Manipulation checks. Participants indicated their agreement with the same two statements regarding group similarity and diversity as in Study 1.

Conformity. We assessed the degree of conformity based on the number of experimental trials (out of eight) in which participants followed suit by selecting the weaker applicant (see OSM for analyses of filler trials).

Group belonging concerns. To investigate evidence for normative influence, we assessed group belonging concerns by averaging two items with 7-point scales (1 = *not at all*, 7 = *very much*): “I wanted to fit in with my group members” and “I wanted my group members to like me” ($\alpha = .85$).

Group identification and trust in group members’ judgment. Using the same scale, we investigated evidence for informational influence with measures of group identification and trust. We evaluated how much participants identified with their group members by averaging two items: “I identified with my group members” and “I felt like part of a group” ($\alpha = .79$). We evaluated how much participants trusted their group members’ judgment by averaging four items: “My group members’ decisions helped guide my own decisions,” “In general, I trusted my group members’ judgments about which applicant should be admitted,” “It felt natural to agree with my group members,” and “I felt comfortable picking a different applicant than my group members” (reverse-scored; $\alpha = .70$).

Results

Manipulation Checks

Participants in the homogeneous condition perceived their group to be less racially diverse and more similar to themselves than participants in the diverse condition (all t s > 2.02 , all p s $< .025$, all r s $> .19$)², indicating that the virtual group diversity manipulation was effective. Table 3 presents descriptive statistics and Table 4 presents correlations for Study 2 variables.

Conformity

Overall, 64% of participants conformed at least once on experimental trials. Study 2 replicated the primary effect obtained in Study 1: participants in the homogeneous condition conformed significantly more often ($M = 21.8\%$) than participants in the diverse condition ($M = 12.5\%$), $t(101) = 2.50$, $p = .014$, $r = .24$, 95% CI = [.05, .41]. These results are consistent with past research showing that absolute levels of conformity are often lower in virtual than face-to-face contexts (e.g., Laporte et al., 2010; Smilowitz et al., 1988).

Group Belonging Concerns

There was no difference in belonging concerns between participants in homogeneous and diverse conditions, $t(100) = .74$, $p = .46$.

Group Identification and Trust in Group Members' Judgments

We observed a non-significant trend such that group identification was higher in the homogeneous versus diverse condition, $t(100) = 1.48$, $p = .14$. We also observed that participants in the homogeneous condition trusted their group members' decisions significantly more than participants in the diverse condition, $t(100) = 2.23$, $p = .028$, $r = .22$, 95% CI = [.03, .40]. See OSM for mediation analyses with group identification and trust.

TABLE 3
Study 2 Outcomes by Group Condition

² One participant did not respond to the post-task measures.

Measure	Homogeneous <i>M (SD)</i>	Racially Diverse <i>M (SD)</i>
<i>Conformity</i>	21.8% (20.9)*	12.5% (16.4)
<i>Trust in group judgment</i>	2.83 (1.06)*	2.38 (.98)
<i>Group identification</i>	3.35 (1.19)	2.95 (1.47)
<i>Group belonging concerns</i>	3.43 (1.18)	3.61 (1.32)
<i>Manipulation Checks</i>		
<i>Perceived diversity</i>	3.00 (1.57)***	5.32 (1.90)
<i>Perceived similarity</i>	3.63 (1.07)*	3.09 (1.28)

Note. * $p < .05$, *** $p < .001$; all measures (except conformity) employed 1-7 response scales.

TABLE 4
Correlations among Study 2 Variables

Variable	1	2	3	4
1. <i>Conformity</i>				
2. <i>Trust in group judgment</i>	.29**			
3. <i>Group identification</i>	.14	.42***		
4. <i>Group belonging concerns</i>	-.04	.51***	.50***	
5. <i>Perceived diversity</i>	-.12	-.17	.02	.10
6. <i>Perceived similarity</i>	.16	.32**	.56***	.38***

* $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Study 2 replicated the primary result of Study 1: White individuals conformed more in racially homogeneous (versus diverse) group settings. We obtained this result with a more representative community sample and a more precise operationalization of mere membership in a group context, thus bolstering confidence in external and internal validity. Study 2 also suggests that a form of informational influence—specifically Whites’ inclination to trust their group members’ judgments—may be part of the reason why Whites conform more in homogeneous versus diverse group contexts.

Study 3

Study 3 had two goals: to clarify why and when diversity influences conformity. We probed two plausible mediating processes given preliminary evidence that a form of trust underlies this effect. We also examined the possibility that stereotypic associations of minorities as less competent than Whites (e.g., Fiske, Cuddy, Glick, & Xu, 2002) drive Whites' tendency to conform more in homogeneous settings. Though there was no difference in participants' self-reports of perceived group competence in Study 1 and the diverse condition included racial minorities who are stereotyped to be intellectually competent (i.e., Asians), social desirability concerns may have limited our ability to detect such a relationship. We also examined the possibility that as it becomes clear to Whites that other White group members support a seemingly questionable decision, they become more inclined to rethink the conceivable merits of this decision, and thereby conform. To assess these possibilities, we included a measure of social group competence and a measure of individuals' tendency to reconsider their decisions.

With regard to boundary conditions, we examined whether Whites conform less in diverse groups only when they have solo or numerical minority status (e.g., groups in which all other members are racial outgroups; Sekaquaptewa & Thompson, 2002) or if this effect would extend to less distinct representations of group diversity. We assessed this by introducing a second diverse group condition that included another White individual.

Participants and Design

We recruited 327 White adults from Amazon's Mechanical Turk for payment (\$1). We increased our target sample size to approximately 100 participants per condition in anticipation of observing more modest-sized effects given the fully online—and thus more socially-removed—group setting. Nineteen participants indicated that they did not believe their virtual

group members were real and were excluded (see OSM), leaving 308 participants (140 female; $M_{\text{age}} = 34.71$, $SD = 10.56$).

Procedure

Study 3 employed the same methods as in Study 2 except we recruited online participants. We randomly assigned participants to: 1) a homogeneous condition (identical to Study 2); 2) a diverse condition (identical to Study 2); or 3) an alternative diverse condition in which they were in a group with one White person, one Black person, and one East Asian person.

Dependent Measures

Manipulation checks. Participants indicated their agreement with the same two statements regarding group similarity and diversity as in previous studies.

Conformity. We assessed conformity as in Study 2 (see OSM for filler trial analyses).

Perceived competence. We measured perceived competence based on Fiske et al. (2002), which references societal (versus personal) beliefs to mitigate self-presentational concerns. We averaged four items on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*): “In society, to what extent would your group members be viewed as [competent; confident; independent; educated]” ($\alpha = .88$).

Tendency to reconsider one’s decisions. To assess the degree to which participants’ group members prompted individuals to question their decisions, we averaged four items on the same scale: “My group members made me [think twice about my decisions; think about my decision in new ways; consider my decisions from multiple perspectives; think carefully about my decisions]” ($\alpha = .89$).

Results

Manipulation Checks

A one-way ANOVA demonstrated significant effects of condition on perceptions of group diversity, $F(2, 305) = 341.19, p < .001, \eta_p^2 = .69$, and perceived similarity to group members, $F(2, 305) = 5.34, p = .005, \eta_p^2 = .034$. Planned contrasts indicated that participants in the homogeneous condition perceived their group to be less racially diverse and more similar to themselves than participants in the original diverse condition (all $t_s > 3.06$, all $p_s < .003$), the diverse condition that included another White individual (all $t_s > 2.51$, all $p_s < .013$), and the diverse conditions combined (all $t_s > 3.22$, all $p_s < .002$). There was no difference in perceived diversity or perceived similarity between the two diverse conditions (all $t_s < 1.25, p_s > .21$). These results indicate that the diversity manipulation was effective. Table 5 presents descriptive statistics and Table 6 presents correlations for Study 3 variables.

Conformity

Overall, 60% of participants conformed at least once on experimental trials. A one-way ANOVA showed a significant effect of condition, $F(2, 305) = 3.60, p = .028, \eta_p^2 = .023$. Participants in the homogeneous condition conformed marginally more ($M = 24.0\%$) than participants in the original diverse condition ($M = 18.2\%$), $t(305) = 1.74, p = .082, r = .10$, 95% CI = [-.02, .14], and significantly more than the diverse condition that included another White individual ($M = 15.3\%$), $t(305) = 2.64, p = .009, r = .15$, 95% CI = [.01, .17]. Though the difference between the homogeneous and original diverse condition only reached marginal significance, participants in the homogeneous condition conformed significantly more than the two diverse conditions combined, $t(305) = 2.53, p = .012, r = .14$, 95% CI = [.04, .25], indicating that the effect of diversity on reduced conformity extends beyond contexts in which Whites have

solo or numerical minority status. The diverse conditions did not significantly differ from each other, $t(305) = .88, p = .38$.

Perceived Competence

There was no effect of racial group composition on perceived competence, $F(2, 305) = .049, p = .95$ (see OSM for additional analyses).

Tendency to Reconsider One's Decisions

We did not observe a significant effect of condition, $F(2, 305) = 2.14, p = .12, \eta_p^2 = .014$. Planned contrasts showed participants in the homogeneous condition were significantly more likely to reconsider their decisions than participants in the diverse condition including another White individual, $t(305) = 2.02, p = .044, r = .11$, and marginally more than participants in the diverse conditions combined, $t(305) = 1.96, p = .051, r = .11$, but not in comparison to the original diversity condition, $t(305) = 1.37, p = .17$ (although the means were in the predicted direction). The diverse conditions did not significantly differ from each other, $t(305) = .64, p = .53$.

These results provide some evidence that Whites in homogeneous (versus racially diverse) settings are more likely to reconsider their decisions after learning how their fellow group members responded. This is consistent with the finding from Study 2 that Whites are more inclined to trust their homogeneous group members' judgments. Accordingly, we examined whether the tendency to reconsider one's decision may help to explain why individuals tended to conform more in the context of homogeneous versus diverse groups. We used bootstrapped mediation analyses with 5000 samples and bias corrected 95% confidence intervals (PROCESS macro, Model 4; Hayes, 2013) with racial group composition (homogeneous = 0, diverse [combined] = 1) as the predictor, tendency to reconsider one's decisions (centered) as the

mediator, and conformity as the outcome. Supporting mediation, we observed a significant indirect effect of racial composition on conformity through the tendency to reconsider one's decisions, indirect effect = $-.01$, $SE = .007$, 95% CI = $[-.03, -.0005]$. These results indicate that participants conformed more in homogeneous than diverse groups, in part, because they were more likely to reconsider their initial assessment in light of their group members' responses.

TABLE 5
Study 3 Outcomes by Group Condition

Measure	Homogeneous <i>M (SD)</i>	Racially Diverse <i>M (SD)</i>	Racially Diverse + 1 White <i>M (SD)</i>
<i>Conformity</i>	24.0% (30.2) ^{b,c}	18.2% (19.2)	15.3% (20.7)
<i>Perceived competence</i>	4.86 (1.32)	4.89 (1.15)	4.84 (1.10)
<i>Reconsider decisions</i>	3.88 (1.68) ^b	3.59 (1.48)	3.45 (1.47)
<i>Manipulation Checks</i>			
<i>Perceived diversity</i>	2.10 (1.67) ^{a,b,c}	6.06 (.95)	5.85 (.91)
<i>Perceived similarity</i>	4.26 (1.81) ^{a,b,c}	3.56 (1.48)	3.69 (1.58)

Note. ^a Denotes a significant difference between the homogeneous and the original diverse condition; ^b denotes a significant difference between the homogeneous and racially diverse condition with one White member; ^c denotes a significant difference between the homogeneous condition and both diverse conditions when combined, $p < .05$. There were no differences between the two diverse conditions. All measures (except conformity) employed 1-7 response scales.

TABLE 6
Correlations among Study 3 Variables

Variable	1	2	3	4
1. <i>Conformity</i>				
2. <i>Reconsider decisions</i>	.23**			
3. <i>Perceived competence</i>	.19**	.26**		
4. <i>Perceived diversity</i>	-.08	-.03	.10	
5. <i>Perceived similarity</i>	.15**	.35**	.46**	-.15**

* $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Study 3 helped clarify when and why the findings from Studies 1 and 2 emerge. Whites conformed more in racially homogeneous than diverse group settings (including a diverse group that included another White individual). These results suggest that the effects of racial diversity on reduced conformity extend beyond settings in which Whites have solo status. Evidence further suggests that this effect was not driven by a straightforward White = competent heuristic. Rather, Studies 2 and 3 suggest a more deliberate tendency for Whites to carefully reconsider their initial impression after learning about their White (versus racially diverse) group members' decisions, perhaps because they deem their judgments to be more trustworthy.

General Discussion

We show that Whites' mere membership in a racially diverse (versus homogeneous) group reduces their propensity to conform to a clearly inferior decision. This effect was robust across three experiments despite changes to the proximity of the group setting (in-person versus virtual) nature of the participant sample (undergraduate, community, online), and type of diversity (all racial minorities or racial minorities and one white individual). Our evidence stems from more ecologically valid operationalizations of diversity than in past research, which largely utilize White-Black and minimal ingroup/outgroup binaries. This study is, to our knowledge, the first to empirically assess the effect of racial diversity on individuals' tendency to conform.

Our findings support theorizing from research on social influence and social categorization, which argues that people are more influenced by similar versus different others (Abrams & Hogg, 1990; Brock, 1965; Latané, 1981; Mackie et al., 1990; Platow et al., 2005; Shteynberg & Apfelbaum, 2013). Our results suggest that a form of informational influence explains, in part, why Whites conformed more in the context of racially homogeneous versus

diverse group settings. Namely, Whites in homogeneous (versus diverse) settings were more likely to reconsider their own decisions after learning that their fellow group members supported the same questionable decision, perhaps because they were more inclined to trust the wisdom of other Whites' judgments. This evidence dovetails with recent work arguing that people become overly reliant on and responsive to others' decisions in homogeneous settings (Levine et al., 2014).

Importantly, our findings indicate that even absent discussion (Studies 1-3) or face-to-face social cues (Studies 2 and 3), *mere membership* in racially diverse versus homogeneous groups can reduce conformity. These findings support existing arguments that the potential benefits of group diversity need not come solely from new perspectives contributed by racial minorities, but also from the influence of racial group composition on majority group members' behavior (Sommers, 2006).

Further, these results suggest a limitation regarding existing conceptions of the "normal" rate of conformity. The rate of conformity we observe in homogeneous groups in Study 1 (i.e., 31%) is virtually identical to the grand mean reported in classic conformity research (i.e., 32%; Asch, 1956), which is largely based on evidence from homogeneous (i.e., all-White) samples. Our results suggest that previously established base rates for conformity may be more indicative of the rates at which White individuals conform in *homogeneous* groups (Apfelbaum et al., 2014).

However, it remains unclear how diversity or homogeneity affects conformity among non-White individuals. Recent work shows that, compared to Whites, racial minorities perceive groups as more diverse when they include racial ingroup members (Bauman, Trawalter, & Unzueta, 2014), suggesting that the subjective experience of racial diversity may vary between

racial majority and minority individuals. Furthermore, it is worth noting that we examined individual decision-making in the context of a group, rather than group decision-making. Additional research should investigate whether the observed conformity effects emerge in less structured group decision-making settings that allow for discussion and debate and whether these effects come at the expense of strained intragroup dynamics or of decision-making efficiency. Furthermore, past research finds that Whites' concerns about appearing prejudiced can shape their decisions on race-relevant tasks (Apfelbaum, Sommers, & Norton, 2008; Crandall & Eshleman, 2003; Plant & Devine, 1998). Thus, future work should examine whether the opposite patterns of results—more conformity in racially diverse versus homogeneous settings—emerges on race-relevant tasks (e.g., by adding stereotypically White and or Black applicant names to the conformity task materials).

In closing, from student groups and organizational teams to juries and governmental committees, questions persist regarding how best to optimize individuals' decisions in group settings and what impact racial diversity may have. The current research suggests that, in the face of consensus emerging around a questionable decision, racial diversity increases the likelihood that White individuals will hold fast to what they believe to be correct.

References

- Abrams, D., & Hogg, M. A. (1990). Social identification, self-categorization and social influence. *European Review of Social Psychology, 1*, 195-228.
doi:10.1080/14972779108401862
- Apfelbaum, E. P., Phillips, K. W., & Richeson, J. A. (2014). Rethinking the baseline in diversity research: Should we be explaining the effects of homogeneity? *Perspectives on Psychological Science, 9*, 235-244. doi:10.1177/1745691614527466
- Apfelbaum, E. P., Sommers, S. R., & Norton, M. I. (2008). Seeing race and seeming racist? Evaluating strategic colorblindness in social interaction. *Journal of Personality and Social Psychology, 95*(4), 918-932. doi:[10.1037/a0011990](https://doi.org/10.1037/a0011990)
- Asch, S. E. (1951). Effects of group pressure on the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp. 177-190). Pittsburgh: Carnegie Press.
- Asch, S.E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological Monographs: General and Applied, 70*, 1-70.
doi:10.1037/h0093718
- Bauman, C.W., Trawalter, S., & Unzueta, M. M. (2014). Diverse according to whom? Racial group membership and concerns about discrimination shape diversity judgments. *Personality and Social Psychology Bulletin, 40*, 1354-1372.
doi:10.1177/0146167214543881
- Bond, R. (2005). Group size and conformity. *Group Processes & Intergroup Relations, 8*, 331-354. doi:10.1177/1368430205056464
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using

- Asch's (1952b, 1956) line judgment task. *Psychological Bulletin*, *119*, 111-137.
doi:10.1037/0033-2909.119.1.111
- Brock, T. C. (1965). Communicator-recipient similarity and decision change. *Journal of Personality and Social Psychology*, *1*, 650-654. doi:10.1037/h0022081
- Cialdini R. B., Goldstein N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, *55*, 591-621. doi:10.1146/annurev.psych.55.090902.142015
- Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, *129*, 414-446.
doi:10.1037/0033-2909.129.3.414
- Dino, A., Reysen, S., & Branscombe, N. R. (2008). Online interactions between group members who differ in status. *Journal of Language and Social Psychology*, *28*, 85-93.
doi:10.1177/0261927X08325916
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. *Advances in Experimental Social Psychology*, *36*, 1-52. doi:10.1016/S0065-2601(04)36001-6
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of personality and social psychology*, *82*(6), 878-902.
doi:10.1037/0022-3514.82.6.878
- Goethals, G. R., & Nelson, R. E. (1973). Similarity in the influence process: The belief-value distinction. *Journal of Personality and Social Psychology*, *25*, 117-122.
doi:10.1037/h0034266
- Goncalo, J. A., & Duguid, M. M. (2012). Follow the crowd in a new direction: When conformity

- pressure facilitates group creativity (and when it does not). *Organizational Behavior and Human Decision Processes*, 118, 14-23. doi:10.1016/j.obhdp.2011.12.004
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hogg, M. A., Adelman, J. R., & Blagg, R. D. (2010). Religion in the face of uncertainty: An uncertainty-identity theory account of religiousness. *Personality and Social Psychology Review*, 14, 72-83. doi:10.1177/1088868309349692
- Janis, I. L. (1972). *Victims of groupthink: A psychological study of foreign-policy decisions and*
- Kim, J. (2009). "I want to be different from others in cyberspace" The role of visual similarity in virtual group identity. *Computers in Human Behavior*, 25, 88-95.
doi:10.1016/j.chb.2008.06.008.
- Laporte, L., van Nimwegen, C., & Uyttendaele, A. J. (2010). Do people say what they think: Social conformity behavior in varying degrees of online social presence. In *Proceedings of the 6th Nordic Conference on Human-Computer Interaction: Extending Boundaries* (pp. 305-314). New York: ACM Press.
doi:10.1145/1868914.1868951
- Latané, B. (1981). The psychology of social impact. *American Psychologist*, 36, 343-356.
doi:10.1037/0003-066X.36.4.343
- Levine, S. S., Apfelbaum, E. P., Bernard, M., Bartelt, V. L., Zajac, E. J., & Stark, D. (2014). Ethnic diversity deflates price bubbles. *Proceedings of the National Academy of Sciences*, 111, 18524-18529. doi:10.1073/pnas.1407301111
- Levine, M., Cassidy, C., Brazier, G., & Reicher, S. (2002). Self-Categorization and Bystander

- Non-intervention: Two Experimental Studies. *Journal of Applied Social Psychology*, 32, 1452-1463. doi:10.1111/j.1559-1816.2002.tb01446.x
- MacDonald, G., Nail, P. R., & Levy, D. A. (2004). Expanding the scope of the social response context model. *Basic and Applied Social Psychology*, 26, 77-92. doi:10.1207/s15324834basp2601_7
- Mackie, D. M., Worth, L. T., & Asuncion, A. G. (1990). Processing of persuasive in-group messages. *Journal of Personality and Social Psychology*, 58, 812-822. doi:10.1037/0022-3514.58.5.812
- McKenna, K. Y., Green, A. S., & Gleason, M. E. (2002). Relationship formation on the Internet: What's the big attraction? *Journal of Social Issues*, 58, 9-31. doi:10.1111/1540-4560.00246
- Orive, R. (1988). Social projection and social comparison of opinions. *Journal of Personality and Social Psychology*, 54, 953-964. doi:10.1037/0022-3514.54.6.953
- Phillips, K. W., Mannix, E. A., Neale, M. A., & Gruenfeld, D. H. (2004). Diverse groups and information sharing: The effects of congruent ties. *Journal of Experimental Social Psychology*, 40, 497-510. doi:10.1016/j.jesp.2003.10.003
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832. doi:10.1037/0022-3514.75.3.811
- Platow, M. J., Haslam, S. A., Both, A., Chew, I., Cuddon, M., Goharpey, N., ... & Grace, D. M. (2005). "It's not funny if they're laughing": Self-categorization, social influence, and responses to canned laughter. *Journal of Experimental Social Psychology*, 41, 542-550. doi:10.1016/j.jesp.2004.09.005

Richeson, J.A., & Sommers, S.R. (2016). Toward a social psychology of race and race relations for the twenty-first century. *Annual Review of Psychology*, 67, 439-563.

doi:10.1146/annurev-psych-010213-115115

Rosander, M., & Eriksson, O. (2012). Conformity on the Internet—The role of task difficulty and gender differences. *Computers in Human Behavior*, 28, 1587-1595.

doi:10.1016/j.chb.2012.03.023

Sacerdote, B. (2001). Peer effects with random assignment: Results for Dartmouth

Roommates. *Quarterly Journal of Economics*, 116, 681-704. doi: 10.3386/w7469

Sekaquaptewa, D. & Thompson, M. (2002). The differential effects of solo status on members of high- and low-status groups. *Personality and Social Psychology Bulletin*, 28, 694-707.

doi:10.1177/0146167202288013

Shteynberg, G., & Apfelbaum, E. P. (2013). The power of shared experience: Simultaneous observation with similar others facilitates social learning. *Social Psychological and Personality Science*, 4, 738-744. doi:10.1177/1948550613479807

Siegel, A. E., & Siegel, S. (1957). Reference groups, membership groups, and attitude change. *The Journal of Abnormal and Social Psychology*, 55, 360-364.

doi:10.1037/h0041502

Smilowitz, M., Compton, D. C., & Flint, L. (1988). The effects of computer mediated communication on an individual's judgment: A study based on the methods of Asch's social influence experiment. *Computers in Human Behavior*, 4, 311-321.

doi:10.1016/0747-5632(88)90003-9

Sommers, S. R. (2006). On racial diversity and group decision making: identifying multiple

- effects of racial composition on jury deliberations. *Journal of Personality and Social Psychology*, *90*, 597-612. doi:10.1037/0022-3514.90.4.597
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp 15-40). Cambridge: Cambridge University Press.
- Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes: Theory and Research*, (pp. 77-122). Greenwich, JAI Press.
- van Prooijen, J. W. (2009). Procedural justice as autonomy regulation. *Journal of Personality and Social Psychology*, *96*, 1166-1180. doi:10.1037/a0014153
- Weber, J. G. (1994). The nature of ethnocentric attribution bias: Ingroup protection or enhancement?. *Journal of Experimental Social Psychology*, *30*, 482-504.
doi:10.1006/jesp.1994.1023