ABSTRACT (150 word limit): Past research demonstrates that people prefer to affiliate with others who resemble them demographically and ideologically. However, we posit that this tendency toward homophily may be overridden by a desire to stand out when competing for scarce opportunities. Across six experiments, we find that anticipated competition weakens people’s desire to join groups that include similar others. When expecting to compete against fellow group members, women prefer to join all-male groups, Black participants prefer to join all-White groups, and partisans prefer to join groups composed of members of the opposite political party at a significantly higher rate than they do in the absence of competition. Two follow-up studies show that participants’ desire to stand out from other group members mediates this effect. Our findings highlight an important boundary condition to past research on homophily, shedding light on when and why minorities prefer to join groups in which they will be underrepresented.

KEYWORDS: diversity, gender, race, group selection, competition, homophily

HIGHLIGHTS (3 to 5 bullet points, up to 85 characters each):
- Competition for scarce opportunities reduces the desire to join groups with similar others
- Women and minorities are more likely to opt in to token status under competition
- The desire to stand out from others mediates competition’s effects on homophily
Introduction

Diversity is associated with enhanced group and organizational performance (Hewlett, Marshall, Sherbin, & Gonsalves, 2013; Hunt, Layton, & Prince, 2015). For example, gender diversity is correlated with greater collective intelligence in groups (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010), and demographic diversity has been found to improve firm and group problem-solving and increase creativity and innovation (Loyd, Wang, Phillips, & Lount, 2012; McLeod, Lobel, & Cox, 1996). As a result, many organizations and scholars have focused considerable attention on finding ways to increase diversity and inclusion in organizations (e.g., Apfelbaum, Grunberg, Halevy, & Kang, 2017; Kang, DeCelles, Tilcsik, & Jun, 2016; Kennedy & Kray, 2014; Kennedy, McDonnell, & Stephens, 2016; Martin & Phillips, 2017; Rosette, Akinola, & Ma, 2018; Schroeder & Risen, 2016). To facilitate this goal of building more diverse organizations, it’s critical to understand why underrepresented minorities choose one job offer over another. In this paper, we reveal that, surprisingly, when expecting to compete for scarce resources, women and minorities are attracted to groups in which they will have token status.

Much of our understanding about why prospective group members are attracted to certain groups is based on research on “homophily.” Homophily describes the tendency to join groups composed of people whose beliefs, attitudes, and demographic traits resemble one’s own (see McPherson, Smith-Lovin, & Cook, 2001 for a review). There is particularly strong evidence for homophily among members of underrepresented groups (Baugher, Varanelli, & Weisbord, 2000; Mehra, Kilduff, & Brass, 1998; cf. Umphress, Smith-Crowe, Brief, Dietz, & Watkins, 2007), in part due to the aversive consequences that women and racial minorities face when they are “tokens,” or severely underrepresented in work groups (Cohen & Swim, 1995; Kanter, 1977).
While existing evidence suggests that people generally prefer to join groups composed of others who share their social identity (McPherson, Smith-Lovin, & Cook, 2001; Byrne, 1969), we posit that past research on homophily and similarity attraction may have overlooked an important boundary condition to this preference. Specifically, intra-group competition—a common feature of organizational life that is often key to workplace advancement—may affect which groups people prefer to join. Across a wide range of domains, competition has been shown to increase focus on strategic thinking and social comparisons, as well as to reduce focus on maintaining relationships (Camerer, 2003; Halevy, Cohen, Chou, Katz, & Panter, 2014; Kilduff, 2014). Further, competition for scarce recognition gives rise to a desire for uniqueness (Maslach, 1974). Because race and gender are highly salient identities for social categorization (Stangor, Lynch, Duan, & Glas, 1992), we hypothesize that this desire for uniqueness will increase the rate at which underrepresented minorities in organizations (e.g., female employees, Black employees) prefer to join groups of dissimilar others. Underrepresented minorities may choose to join groups where they will be underrepresented either because (a) they believe their performance will stand out relative to majority group members by virtue of being a demographic minority or (b) because they believe organizations have implicit quotas for minorities and wish to stand out demographically to reduce their chances of being harmed by implicit quotas. In short, to satisfy the desire to stand out from others, women and minorities who face competition may strategically choose to join groups in which their identity will make them more conspicuous.

In this paper, across a series of experiments, we show that group preferences are shaped by both group composition and anticipated intra-group competition in ways that have previously been overlooked. Highlighting an important boundary condition to homophily, we find that
competition for scarce opportunities can be an important moderator of individuals’ group preferences. In particular, we challenge the widely held assumption that historically underrepresented minorities consistently prefer to be surrounded by similar others (cf. Duguid, 2011; Umphress et al., 2007). Practically, our research provides insights into when and why groups are attractive to people, with particularly useful implications for organizations seeking to increase diversity.

Past Research on the Desire for Similarity in Groups

Homophily, defined as the tendency to affiliate with others with similar beliefs, attitudes, and personal traits (McPherson et al., 2001), is a powerful phenomenon that has been documented across a wide range of contexts and types of relationships (see McPherson et al., 2001 for a review; McPherson & Smith-Lovin, 1987). Past research on homophily suggests that, all else being equal, people are more likely to join groups composed of people who are similar to them.

There is ample evidence that people exhibit homophily when deciding which groups to join. For example, studying the decisions of undergraduates tasked with choosing a group to work with on a semester-long project, Baugher et al. (2000) found that self-selected groups were much more similar – or less diverse – with regard to race, gender, and cultural background than would be expected by chance. Mehra et al. (1998) identified a similar pattern in the friendship networks of MBA students: students were significantly more likely to name same-sex and same-race students as members of their friend group than would be expected by chance. Group composition has also been shown to predict people’s attitudes toward their work groups. In a survey of employees of a large company, Riordan and Shore (1997) found they had more
positive attitudes toward their work groups when those groups were more demographically similar to them.

One of the driving forces behind homophily is the common tendency to like people who resemble us more than people who do not (McPherson et al., 2001). Similarity-attraction theory posits that people prefer to affiliate with those who share their attitudes and beliefs (Byrne, 1969; Byrne, London, & Reeves, 1968). Not only do we have positive affective responses to those who are similar to us, but we expect increased comfort and trust when interacting with them (Baskett, 1974; Byrne, 1969, 1997). While early research on similarity-attraction theory focused on attitude similarity, later work found that demographic similarity also predicts attraction (Byrne, 1997; Montoya, Horton, & Kirchner, 2008; Turban, Dougherty, & Lee, 2002).

While the previous findings and theorizing apply to all people, racial minorities and women have particular reasons to exhibit homophily. For these groups, homophily may also be propelled by an aversion to being in the minority in social or organizational groups. For example, there is evidence that members of negatively stereotyped groups feel isolated, hyper-visible, and pressured to conform to stereotypical roles or behaviors when underrepresented in groups (Chatman, Boisnier, Spataro, Anderson, & Berdahl, 2008; Yoder, 1991). Furthermore, being severely underrepresented in a work group can harm an individual’s performance (Thompson & Sekaquaptewa, 2002) and reduce her job satisfaction (Niemann & Dovidio, 1998). Together, these findings suggest that the experience of being underrepresented in a group can be unpleasant and taxing. As a result, underrepresented minorities should demonstrate preferences for similar others when choosing to join a group, both due to the attracting forces of similarity and the repelling forces of being in the minority in a group.

*The Effects of Competition on Group Preferences*
Common in organizations, competition is a key component of workplace advancement. Competition leads to increased motivation and a focus on winning (Berger & Pope, 2011; Kilduff, 2014; Plass et al., 2013); for example, Berger and Pope found in laboratory studies that participants who are told they’re competing against others persist longer on tedious tasks. Further, past research has shown that when people in organizations face competition for scarce resources, they are more likely to engage in strategic thinking (Camerer, 2003; Halevy et al., 2014; Ray, King-casas, Montague, & Dayan, 2009) and to make comparative social judgments in order to evaluate their position and status (Ashmore, Jussim, & Wilder, 2001). Thus, the prospect of intra-group competition (i.e., competing against fellow group members) is likely to encourage people to think strategically and engage in social comparison processes as they consider the best ways to achieve success.

One promising strategy in the face of competition for scarce opportunities may be to attempt to stand out from one’s peers. Uniqueness prompts attention and increases perceptions of status, both of which can be beneficial in competitions (Maslach, Stapp, & Santee, 1985; Snyder & Lopez, 2001). For example, when competing for rewards, people generally engage in more self-differentiating behaviors (Maslach, 1974). In addition, job candidates often attempt to differentiate themselves from others by giving unique answers to traditional interview questions, a strategy that leads to more positive outcomes (Roulin et al., 2011).

To stand out from peers, people may elect to join groups where their beliefs, attitudes, and personal traits make them unusual. When competing, we are more likely to compare ourselves to those who are more similar to us because we perceive them to be more appropriate targets for comparison than dissimilar others (Brewer & Gardner, 1996; Duffy, Scott, Shaw, Tepper, & Aquino, 2012; Hoffman, Festinger, & Lawrence, 1954). Shared attributes are even
more likely to be a basis for social comparison when these attributes are relatively rare (Kilduff, Elfenbein, & Staw, 2010; Mehra et al., 1998). If people facing competitive pressure believe that evaluators are likely to make comparisons within social categories, they may prefer to surround themselves with dissimilar others to stand out. This may be a wise strategy for members of certain groups: past research has found that women and racial minorities tend to stand out in groups, especially when they are tokens (Dovidio, Glick, & Rudman, 2008). For underrepresented minorities, standing out in this way also means avoiding groups in which similar others will be their direct competitors, and therefore part of their relevant comparison set. If people believe that managers may be biased or have implicit quotas for how many members of a certain group they will support or promote, then standing out as the only minority in the running for limited opportunities could be strategically beneficial. In fact, there is evidence that some organizations do have implicit quotas regarding the degree of diversity they aim to attain in groups and leadership teams (Chang et al, 2018; Dezso, Ross, and Uribe, 2016). This suggests standing out as the only underrepresented minority in a group could actually improve access to opportunities, particularly when advancement is competitive.

People who are tokens expect their work and behavior to be more visible to colleagues and evaluators, survey research shows (Kanter, 1977). In an experimental study where women were placed in either token or non-token positions in task-oriented groups, female tokens were significantly more likely than female non-tokens to expect to stand out in their group (Cohen & Swim, 1995). In addition, in high-prestige groups, female tokens have been found to reject female applicants in an attempt to preserve their token status and reduce the likelihood of being compared to other women (Duguid et al., 2012). Ely (1994) also finds that women in male-dominated firms – spurred by a perceived scarcity of senior positions for women and a desire to
avoid being compared to other women – tend to avoid relationships with other women. In sum, members of historically underrepresented groups may anticipate benefits from being in the minority in a group when competing for scarce opportunities and may attempt to distance themselves from others who share salient identity characteristics.

Taken together, this evidence suggests that people facing the prospect of intra-group competition may anticipate garnering some benefits from being underrepresented. In particular, they may believe that being in the minority on a salient identity dimension will help them stand out from their fellow group members and increase their chances of attaining scarce opportunities. Therefore, we hypothesize that competition will decrease people’s desire to join groups comprised of similar others and that this effect will be mediated by people’s self-reported desires to stand out within the group.

Overview of Studies

In the remainder of this paper, we present six preregistered studies that test our hypotheses about the influence of competition for scarce opportunities on group preferences. In all of our studies, we invite participants to choose between joining one of two work groups: a group where they will be underrepresented or a group where they will be surrounded by similar others. Our experiments then randomly assign participants to anticipate either competing against other group members for scarce opportunities (e.g., promotions, bonuses) or not. In Study 1, we show that women (Study 1A) and Black participants (Study 1B) are more likely to join an all-male group or all-White group, respectively, when competing for scarce opportunities. In Study 2, we show that this effect extends beyond demographic identity characteristics: Republicans are more likely to join an all-Democratic group and Democrats are more likely to join an all-Republican group when facing competition for scarce opportunities. In Study 3, we show that a
desire to stand out mediates the effect of competition on group selection among women (Study 3A) and political partisans (Study 3B). Finally, extending our previous scenario studies to an incentive-compatible decision setting, in Study 4, we present evidence of this effect in an online work context involving real decisions.

STUDY 1

Study 1A

In Study 1A, we evaluated whether women would be more likely to join an all-male group when facing the prospect of competing against other group members for scarce opportunities. Specifically, women were asked to hypothetically choose between joining one of two groups for a summer internship, and the groups differed only in the proportion of their members who were female. Competition was experimentally manipulated by altering the percentage of the interns who could expect to receive a full-time job offer at the end of the summer.

Methods

491 female U.S. participants were recruited through Amazon’s Mechanical Turk to participate in a 5-6 minute research study for $0.60. This study was preregistered on AsPredicted.org (http://aspredicted.org/blind.php?x=rt44qm).

Participants in our study read a hypothetical scenario in which they were told to imagine they had been offered a summer internship at an organization, and they had to choose which of two different departments to join. They were told that their roles and access to senior colleagues would be the same across departments, so the only difference between the two departments would be their fellow interns. Participants were then asked to report their gender identity.
Participants were randomly assigned to one of two experimental conditions: a competitive condition or a control condition. In the competitive condition, participants were told that only 25% of interns would be offered full-time jobs at the end of the summer, so they would be competing intensely against the other interns in the department they chose for a full-time job offer. In the control condition, participants were told that almost all interns would be offered full-time jobs at the end of the summer, so they would not be competing against the other interns in the department selected for a full-time job offer.

Participants were then asked to choose between the two departments. The information displayed about each department included the photos, names, and college majors of the other summer interns who would be working in the department (see Appendix Figure 1 for an example of our stimuli). One department was composed of seven men. The other department was composed of four men and three women; thus, the composition of this group would be 50% female if the female participant joined that department. The photos of interns displayed were gathered from the Chicago Face Database (Ma, Correll, & Wittenbrink, 2015), and college majors and race were matched across groups, such that the racial composition of the groups was the same and the majors were similar (though not identical, in order to reduce suspicion) in both groups. We stimulus-sampled both the photographs and the college majors associated with each department, creating a total of six stimuli sets. All study materials are available in Online Appendix A.

After choosing a group, participants were asked to answer a free-response question explaining why they had chosen their preferred group. Finally, as a manipulation check, participants indicated to what extent they anticipated competing against the other interns in their department for a full-time job.
Results and Discussion

Our manipulation appeared to work as intended: on a scale from one (Not competing at all) to five (Competing very intensely), participants expected to be competing against the other interns significantly more in the competitive \((M_{\text{competitive}} = 4.67, \text{SD}_{\text{competitive}} = .61)\) than in the control condition \((M_{\text{control}} = 1.57, \text{SD}_{\text{control}} = .97; t(491) = 42.23, p < .001)\).

The dependent variable of interest was the proportion of women in each condition who chose to join the all-male group. As we predicted, women in the competitive condition were significantly more likely to choose to join the all-male group (46.1%) than were women in the control condition (17.5%), \(z(491) = 6.719, p < .001\). These results suggest that women’s willingness to join groups in which they will be surrounded by others who do not share their gender identity is significantly increased when they expect to face intra-group competition.

Study 1B

In Study 1B, we sought to replicate the results of Study 1A with Black participants instead of female participants. Specifically, we examined whether Black participants show a stronger preference for joining a group whose members are all White when they anticipate competing against other group members for scarce opportunities. Again, participants in this study chose between hypothetical departments for a summer internship, and these groups differed in the proportion of Black interns included.

Methods

To recruit enough Black participants in this study to reach our preregistered sample size target of 275-300 respondents, we recruited participants on both Prolific and Amazon’s Mechanical Turk. In total, 278 Black participants were recruited via these sites to participate in a 5-6 minute study. Prolific participants were paid $0.70, while Mechanical Turk participants were
paid $0.60 due to the different pricing thresholds of the two services. This study was pre-registered on AsPredicted.org (http://aspredicted.org/blind.php?x=g3cs9e).

The study design was nearly identical to the design of Study 1A. Participants again were invited to choose which hypothetical department they would prefer to join at a company where they had been offered a summer internship. However, in this study, participants were asked about their racial identity instead of their gender identity, and the racial (rather than gender) composition of the other interns was the primary difference between the two departments. As in Study 1A, participants were randomly assigned to a competitive or control condition. Those in the competitive condition learned that only 25% of interns would be offered full-time jobs at the end of the summer, while those in the control condition were told that almost all interns would be offered full-time jobs.

When choosing which department to join, participants again were shown the photos, names, and college majors of the other summer interns in each department. Both intern groups included four males and three females. In one group, all interns were White; in the other group, there were three Black interns and four White interns, such that the group would be 50% Black if a participant chose to join it. All study materials are available in Online Appendix B.

Results and Discussion

A manipulation check confirmed that our manipulation of intra-group competition was successful: on a scale from one to five, participants expected to compete against their fellow interns for jobs significantly more in the competitive condition (M_{competitive} = 4.49, SD_{competitive} = .82) than in the control condition (M_{control} = 1.50, SD_{control} = .87; t(278) = 29.34, p < .001).

Lending additional support to our primary hypothesis, a significantly higher proportion of Black participants chose to join the all-White group in the competitive condition (36.6%) than in
the control condition (19.9%) \( z(278) = 2.965, p = .003 \). Thus, across Studies 1A and 1B, we found that women (Study 1A) and Black participants (Study 1B) were more likely to choose to join a group in which they would be the only person of their gender or race when they expected to compete against other group members for scarce resources than when they did not expect to compete.

**STUDY 2**

Studies 1A and 1B demonstrated that women and Black people were more willing to join groups in which they would be underrepresented when they anticipated competing against fellow group members for scarce opportunities. In Study 2, we explore whether this effect generalizes to people who belong to salient identity groups that are based on attitudes rather than demographic characteristics. Specifically, we examine which groups Democrats and Republicans prefer to join in an environment where political party affiliation is work-relevant.

**Methods**

We recruited 602 self-identified Republicans and Democrats through Amazon’s Mechanical Turk to participate in a 5-6 minute research study in exchange for $0.60. This study was preregistered on AsPredicted.org (http://aspredicted.org/blind.php?x=9sr2gu).

Participants were asked to imagine that they had recently received a promotion at their organization and could choose which of two department they would like to join upon accepting the new position. We specified that their organization was a “bipartisan think tank” so their political ideology would appear relevant. Participants were also told to imagine that their key goal was to be promoted again within the next year, and that their position, rank, and set of senior colleagues responsible for promotion decisions would be the same for both departments.
Again, we randomly assigned participants to a competitive or control condition. Participants in the competitive condition were told that only 25% of the employees in each department would be offered a promotion at the end of next year, so they would be competing against the other employees in their chosen department for a promotion. Participants in the control condition were told that almost all employees in each department would be offered a promotion at the end of next year, so they would not be competing against fellow department members for a promotion.

Participants were asked their political party affiliation, and only self-identified Democrats and Republicans were included in the study. When choosing between two departments at the think tank, participants were provided with the photos, names, and political party identifications of the other department members. Both groups had identical gender and racial compositions. However, for Democrat participants, one department was composed entirely of employees who identified as Republicans, and for Republican participants, one department was composed entirely of employees who identified as Democrats. The second department included two employees who identified with the same political party as the study participant, three who identified with the opposing political party, and two who identified as Independents.

The dependent variable of interest was the proportion of participants in each condition who chose to join the group where they would be the sole representative of their political party. After making their decision, participants were asked to briefly explain why they had chosen their preferred group. Finally, as a manipulation check, participants indicated to what extent they expected to compete against the other employees in their department for their next promotion. All study materials are available in Online Appendix C.

Results and Discussion
Our manipulation was again successful: on a scale from one to five, participants reported that they expected to compete significantly more against the other employees in their chosen department for their next promotion in the competitive condition ($M_{\text{competitive}} = 4.42$, $SD_{\text{competitive}} = .85$) than in the control condition ($M_{\text{control}} = 1.62$, $SD_{\text{control}} = 1.11$; $t(602) = 34.67$, $p < .001$).

Providing further support for our theorizing, we found that Democrats and Republicans were significantly more likely to choose the group where they would be underrepresented in the competitive condition (18.2%) than in the control condition (7.5%), $z(602) = 3.79$, $p < .001$). As shown in Figure 1, this pattern was present for both Democrats (percent choosing group where their party is underrepresented$_{\text{competitive}} = 16.5$%; percent choosing group where their party is underrepresented$_{\text{competitive}} = 7.1$%; $z(372) = 2.65$, $p = .008$) and Republicans (percent choosing group where their party is underrepresented$_{\text{competitive}} = 20.8$%; percent choosing group where their party is underrepresented$_{\text{competitive}} = 8.2$%; $z(230) = 2.51$, $p = .012$). This study confirms that our findings in Study 1 hold for an attitude-based identity, suggesting that our theorizing extends to non-demographic traits and to attributes that are not historically underrepresented in the workplace.
Figure 1: Percentage of overall, Republican, and Democratic participants choosing opposite-ideology groups in the competitive and control conditions, with standard error bars.

STUDY 3

In Study 3, we turn to an exploration of the mechanism responsible for participants’ increased willingness to join a group in which they would be in the minority when facing the prospect of intra-group competition for scarce opportunities. Specifically, we sought to test whether this effect was driven by participants’ desire to stand out from others when competing for scarce recognition. We tested our mechanism across two studies – one including women (Study 3A) and one including self-identified Republicans and Democrats (Study 3B).

Study 3A

Methods

Two hundred and fifty women were recruited for this study via Amazon’s Mechanical Turk. This study was preregistered on AsPredicted.org (http://aspredicted.org/blind.php?x=qf2yv7).
Study 3A relied on the same paradigm as Study 1A. Participants were asked to imagine that they had been offered a summer internship and then made a hypothetical choice between two departments at the company. The departments were essentially indistinguishable, except that one included an all-male cohort of interns and the other included a mixed-gender cohort of interns. As in previous studies, we randomly assigned participants to either a competitive condition in which they learned that only 25% of interns in their chosen department would receive a job offer at the end of the summer or a control condition in which they learned that all interns could expect to receive a job offer at the end of the summer. However, after participants selected which internship group they preferred to join, we asked them an additional question: “How much did a desire to stand out from other summer interns factor into your choice of department?” Participants responded on a scale from 1 (Not at all) to 7 (Extremely). All study materials are available in Online Appendix D.

Results and Discussion

As in previous studies, our manipulation was successful: participants expected to compete against their fellow interns for a full-time offer significantly more in the competitive condition ($M_{\text{competitive}} = 4.62$, $SD_{\text{competitive}} = .70$) than in the control condition ($M_{\text{control}} = 1.62$, $SD_{\text{control}} = .98$; $t(250) = 27.8$, $p < .001$). In addition, we replicated our findings from Study 1A: significantly more women chose to join the all-male work group in the competitive condition (38.6%) than in the control condition (19.5%) $z(250) = 3.18$, $p = .0015$. Participants also reported that the desire to stand out from the other members of their internship group was a significantly greater factor in their choice of department in the competitive condition ($M_{\text{competitive}} = 4.70$; $SD_{\text{competitive}} = 1.99$) than in the control condition ($M_{\text{control}} = 2.93$; $SD_{\text{control}} = 1.85$; $t(250) = 7.32$, $p < .001$).
We next tested whether self-reported desire to stand out from the rest of the group mediated the relationship between intra-group competition and group choice, as hypothesized (Preacher & Hayes, 2004). First, we documented a significant main effect of assignment to the competitive condition on the desire to stand out ($\beta = 2.14$, $SE = .26$, $p < .001$); the relationship between the desire to stand out and the choice of the all-male group was also significant ($\beta = .098$, $SE = .013$, $p < .001$). Consistent with our mediation hypothesis, the effect of assignment to the competitive condition on study participants’ choice to join the all-male group ($\beta = .191$, $SE = .056$, $p < .001$) was completely eliminated when controlling for participants’ desire to stand out ($\beta = .017$, $SE = .055$, $p = .757$). A Sobel test confirmed that this reduction in effect size was significant ($\beta = .174$, $SE = .034$, $p < .001$), and a 5,000-sample bootstrap analysis (MacKinnon, Fairchild, & Fritz, 2007; Shrout & Bolger, 2002) also produced a bias-corrected 95% confidence interval for the size of the indirect effect that excluded zero (95% CI: .115, .246).

Study 3B

In Study 3B, we sought to replicate the mediation results from Study 3A in a study of Democrats and Republicans rather than women to ensure the generalizability of our findings. 

Methods

Three hundred and fifty-four participants were recruited via Amazon’s Mechanical Turk to participate in a 5-6 minute survey in exchange for $0.60. This study was preregistered on AsPredicted.org (http://aspredicted.org/blank.php?x=6sf4m4).

As in our previous studies, participants were asked to imagine they had been offered a summer job. As in Study 2, we told them it was at a “bipartisan think tank” in order to increase the relevance of their political party identification to the organization. Participants then indicated which of two departments at the think tank they would prefer to join. The departments had the
same race and gender composition, but one included a group with a mix of political party affiliations, while the other group was composed predominantly (though not entirely) of Democrats if the participant reported being a Republican or of Republicans if the participant reported being a Democrat. As in our previous studies, we randomly assigned participants to a competitive condition in which they learned that only 25% of interns in their chosen department would receive a job offer at the end of the summer or a control condition in which they learned that all interns could expect to receive a job offer at the end of the summer.

Finally, as in Study 3A, we included an additional question after participants had selected the group they preferred to join: “How much did a desire to stand out from other summer interns factor into your choice of department?” Participants responded to this question on a scale from 1 (Not at all) to 7 (Extremely). All study materials are available in Online Appendix E.

Results and Discussion

As in our prior studies, our manipulation was successful: participants expected to compete against their fellow interns for a full-time offer significantly more in the competitive condition (\(M_{\text{competitive}} = 4.43, SD_{\text{competitive}} = .89\)) than in the control condition (\(M_{\text{control}} = 1.89, SD_{\text{control}} = 1.18; t(354) = 22.9, p < .001\)). In addition, we replicated the results of Study 2: Democrats and Republicans were significantly more likely to choose to join the group where they would be underrepresented in the competitive condition (35.8%) than in the control condition (24.6%), \(z(354) = 2.17, p = .03\). Participants also reported that the desire to stand out from the other members of their internship group was a significantly greater factor in their choice of department in the competitive condition (\(M_{\text{competitive}} = 4.83; SD_{\text{competitive}} = 1.79\)) than in the control condition (\(M_{\text{control}} = 23.51; SD_{\text{control}} = 1.96; t(354) = 6.59, p < .001\)).
We next sought to test our mediation hypothesis. As in Study 3A, we found a significant, positive effect of random assignment to the competitive condition on participants’ reported desire to stand out ($\beta = 1.48$, $SE = .21$, $p < .001$), and we also found a significant positive relationship between the desire to stand out and the probability of choosing to join a group whose members were predominantly not also members of one’s political party ($\beta = .079$, $SE = .012$, $p < .001$). Consistent with full mediation, the effect of random assignment to the competitive condition on participants’ choice of the group in which their political party was underrepresented ($\beta = .112$, $SE = .049$, $p = .022$) was completely eliminated when participants’ self-reported desire to stand out from other interns was included in our regression model ($\beta = .008$, $SE = .048$, $p = .862$). A Sobel test indicated that this reduction in effect size was significant ($\beta = .105$, $SE = .023$, $p < .001$). Finally, a bootstrap analysis with 5,000 iterations (MacKinnon et al., 2007; Shrout & Bolger, 2002) confirmed that the indirect effect of the desire to stand out on group choice was significant, as the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (95% CI: .065, .153).

Together, Studies 3A and 3B provide support for our hypothesis that the desire to stand out mediates people’s increased desire to join groups in which they will be underrepresented when facing intra-group competition for scarce recognition.

**STUDY 4**

In Study 4, we sought to replicate our key findings from scenario studies in an incentive-compatible context. Workers on Amazon’s Mechanical Turk were invited to choose one of two real work groups to join, knowing that they either would or would not compete against their fellow group members for a bonus.

*Methods*
Five hundred and eighty-three women were recruited through Amazon’s Mechanical Turk to participate in an eight-minute research study in exchange for $0.90 and a potential $0.50 bonus.¹ This study was preregistered on AsPredicted.org (http://aspredicted.org/blind.php?x=j8vm2h).

Participants in our study began by indicating their gender and telling us their preferred nickname and hometown. Participants then were told they would be writing a review for a website along with a group of other MTurk workers and that they would be choosing which of two groups of reviewers to join. The different groups would review different (but very similar) websites and were also composed of different people. Participants also were informed that after writing their website review, they would interact with other members of their group. Finally, participants were told that their review would actually be used to describe the website to a diverse group of consumers and that their reviews would be published along with those of other MTurkers in their group.²

Participants were randomly assigned to one of two experimental conditions: a competitive condition or a control condition. In the competitive condition, participants were told that we would select the three best reviews from each reviewer group and that only the participants who wrote those reviews would earn a $0.50 bonus. Thus, they would be competing against the other MTurkers in their group for a $0.50 bonus. In the control condition, participants were told that we would use all the reviews from each group and that everyone would earn a $0.50 bonus. Therefore, they would not be competing against their fellow group members for a bonus.

¹ We collected 630 female participants on MTurk, aiming for 600 participants after exclusions. Ultimately, we ended up with 583 participants after our pre-registered exclusions.
² This study did not involve deception; we followed through on all promises made to Mturk workers.
Participants then were asked to choose which of two website-evaluation groups to join. As mentioned previously, the groups would evaluate different (but similar) websites (either BuzzFeed.com, HuffingtonPost.com, Vice.com or Vox.com), and membership in the two groups would not overlap. To facilitate their group selection, participants were shown avatars of other group members (revealing their genders) as well as the nicknames and hometowns of each group member (see Appendix Figure 2 for an example). Both groups included nine people, and each participant chose between a group composed exclusively of men and a group composed of five men and four women. Complete study stimuli are available in Online Appendix F.

After selecting their group, participants were asked to write a short review of the website associated with their group of choice. They then read a website review written by a fellow group member and provided feedback. Finally, as a manipulation check, they indicated on a scale from 1 (Not at all) to 5 (Very much) to what extent they felt they would be competing against their fellow group members for a bonus.

Results and Discussion

First, as in previous studies, our manipulation was successful: participants expected to engage in significantly more intra-group competition in the competitive condition ($M_{\text{competitive}} = 3.61$, $SD_{\text{competitive}} = 1.26$) than in the control condition ($M_{\text{control}} = 2.16$, $SD_{\text{control}} = 1.37$; $t(583) = 13.22, p < .001$).

To test our primary hypothesis, we compared the proportion of women in each condition who chose to join the all-male review group. As shown in Figure 2 and consistent with our primary hypothesis and prior scenario studies, significantly more women in the competitive condition chose the all-male group.

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3 We stimuli-sampled in this study, and the two websites up for review were randomly selected from a set of four sites: BuzzFeed.com, HuffingtonPost.com, Vice.com, and Vox.com. All groups displayed were composed entirely of prior participants who had reviewed each of the four websites and provided us with their gender, a nickname, and their hometown. In total, there were three different pairs of group stimuli sampled in this study.
condition chose to join the all-male review group (46.1%) than in the control condition (32.1%); $z(583) = 2.27, p = .023$. In other words, when women expected to compete against fellow group members for a monetary bonus, they were more likely to choose to join an all-male group (in which they would be the sole female) than in the absence of competition. Study 4 offers strong support for our primary hypothesis in a study of real, incentive-compatible decisions in an online workplace.

**Figure 2**: Percentage of women choosing the all-male group in the competitive and control conditions, with standard error bars.

**Discussion and Conclusion**

Across six studies, we show that competition for scarce opportunities increases the rate at which people choose to join groups in which they will be underrepresented. In short, competition serves as a counter-weight to the well-established tendency toward homophily. This effect replicates for women, Black people, and Republicans and Democrats, and it arises in both hypothetical and incentivized choices. Further, our findings from two mediation studies suggest that intra-group competition leads people to place greater value on the opportunity to stand out
from other group members as the only person with their social identity, which in turn leads to the preferences we document.

Our findings shed new light on when work groups will be attractive to historically underrepresented minorities. In the past, it has been assumed that research on homophily and similarity attraction fully explain the affiliation choices of historically underrepresented groups such as women and racial minorities (Baugher et al., 2000; Hinds, Carley, Krackhardt, & Wholey, 2000; Byrne, 1969; cf. Umphress et al., 2007). However, we find that competition acts as a potent moderator of people’s preferences for working with similar others. As a result, our work suggests that, counterintuitively, when competitive organizations are attempting to attract underrepresented minorities, the ideal work groups to highlight may not always be the most diverse.

The effects we document suggest a potential explanation for a well-replicated, previously puzzling finding: in competitive organizations, voluntary turnover for women and minorities is higher in groups with higher proportions of women and minorities (Chatman & O’Reilly, 2004; McGinn & Milkman, 2013; Tolbert, Simons, Andrews, & Rhee, 1995; Zatzick, Elvira, & Cohen, 2003). Our findings suggest that in competitive organizations, underrepresented minorities may believe they are disadvantaged by being surrounded by others who share their demographic identity and may be more likely to exit competitive organizations when their workgroups include more people who resemble them demographically.

The current research has a number of important limitations. For instance, it relies primarily on scenario studies. Although past field research has found evidence consistent with our theorizing and predictions, future research directly testing our theories in the field would be extremely valuable. Another limitation is that our studies only explore the choices of a subset of
the many kinds of minority groups in organizations. Future research extending our findings to a broader set of identity groups would be extremely valuable.

An important issue raised by this research is whether or not women and minorities are wise to choose to join all-male or all-white groups in competitive environments. Past research has shown that when women and racial minorities are in “solo” or token positions, their performance tends to suffer relative to when they are in non-token positions (Thompson & Sekaquaptewa, 2002), as does their organizational commitment (Niemann & Dovidio, 1998). Furthermore, being in token positions can harm long-term psychological well-being and feelings of belonging in the workplace (Kanter, 1977; Major et al., 2014; Sekaquaptewa et al., 2007; Yoder & Sinnett, 1985). Over time, the strategic value of standing out may fade in light of the damaging effects of hyper-visibility and isolation (Cohen & Swim, 1995; Kanter, 1977). Future studies might test whether underrepresented minorities anticipate this tension by measuring which groups they believe will lead them to be happiest at work and where they predict staying the longest. Participants may strategically choose groups in which they will be in the minority when facing the prospect of competition, despite anticipating being happier and remaining longer in groups of similar others.

There is also evidence that being one of few underrepresented minorities in a group can have strategic benefits that people in our studies may anticipate when they choose which group to join, particularly in firms that care about diversity. For example, past research has shown that some companies appear to have implicit quotas on the levels of diversity they aim to achieve in top management (Chang et al., 2018; Dezső et al., 2016). If there are indeed a fixed number of opportunities for women and minorities to advance, then it may in fact be advantageous for them to join groups in which they will “stand out.” Furthermore, Leslie, Manchester, and Dahm (2017)
have shown that high-potential women receive larger rewards in the workplace than high-
potential men precisely because they are in short supply in many firms. Future research that
directly explores whether the kinds of decisions made by women and minorities in our studies
are optimal or sub-optimal for them would be valuable.
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Appendix Figure 1: An example of the stimuli used in Study 1A. The order of the two groups was randomized across participants. Racial diversity was held constant across the two groups, and college majors were matched across groups such that the majors in each group were similar but not identical (e.g., Computer Science and Information Systems), as identical groups may be more likely to raise participant suspicion.
I would like to join the review group for BuzzFeed.com, which includes the following MTurkers:

|        |        |        |
|--------|--------|--------|
| **Ann** | **James** | **Matthew** |
| Wheaton, MD | Beaumont, CA | Okemos, MI |
| **Sam**  | **Melissa** | **Michelle** |
| TN      | CA       | Cortland, OH |
| **Jack** | **Joy**   | **Chris** |
| Dayton, OH | Missoula, MT | Philadelphia, PA |

I would like to join the review group for Vox.com, which includes the following MTurkers:

|        |        |        |
|--------|--------|--------|
| **Steve** | **Marc** | **David** |
| Dallas, TX | Lyman, SC | Boston, MA |
| **James**  | **Jay**   | **John** |
| Riverside, CA | Phoenix, AZ | New York, NY |
| **Matt**   | **Jake**  | **Chet** |
| Jacksonville, FL | New York, NY | Port Huron, MI |

**Appendix Figure 2:** This is an example of two of the groups (out of three pairs of groups from which we randomly sampled stimuli) that participants saw in Study 4. Each group was associated at random with a website from a set of four websites — BuzzFeed, HuffingtonPost, Vice, and Vox. Participants were asked to choose which of the two groups they wanted to join.