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WASHINGTON UNIVERSITY IN ST. LOUIS

Division of Psychological & Brain Sciences  
Social & Personality Psychology

Who Has My Back?

Perceptions of Anti-Racist and Anti-Sexist Allyship Are Predicted by Race, Gender, and Past  
Behavior

by

R. Grace Drake

A thesis presented to  
The Graduate School  
of Washington University in  
partial fulfillment of the  
requirements for the degree  
of Master of Arts

May 2022  
St. Louis, Missouri

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Grace Drake

*Washington University in St. Louis*

*May 2022*

## ABSTRACT

Who Has My Back? Perceptions of Anti-Racist and Anti-Sexist Allyship Are Predicted by Race,  
Gender, and Past Behavior

by

R. Grace Drake

Master of Arts in Psychological and Brain Sciences

Social and Personality Psychology

Washington University in St. Louis, 2022

Calvin K. Lai, Chair

After facing racial or gender discrimination, people often seek support or allyship from others. However, who will provide effective support or allyship is often uncertain. To understand how people of color and women navigate this uncertainty, in two studies we randomly assigned participants to read a series of vignettes about potential allies. In each vignette, a person was described as either Black, Asian, Hispanic, or White and either a man or woman. Participants also sometimes learned that the person had a history of allyship behavior. Participants were then asked to envision that someone made a racist (Study 1) or sexist (Study 2) comment to them and were asked to rate the extent to which they expected the potential ally would become angry (i.e., affective allyship) and take action to support them (i.e., behavioral allyship) in response. We found that participants anticipated more support from people who shared their racial/ethnic group (Study 1), were women, and who had demonstrated past allyship behavior (Studies 1 and 2). Our findings indicate that group-specific stereotypes and shared stigmatization are both important in perceiving someone to be an ally.

# 1. Introduction

In 2019, U.S. congresswomen Alexandria Ocasio-Cortez, Ayanna Pressley, Rashida Tlaib, and Ilhan Omar were targeted by a racist remark from the then current U.S. president, Donald Trump, when he told them to “go back and help fix the totally broken and crime-infested places from which they came” (Pengelly, 2019). In response, the congresswomen and supporters spoke out against these comments, highlighting the blatant racial bias and harm caused by the offensive language. Ocasio-Cortez said: “The country I ‘come from’, and the country we all swear to, is the United States.” After this incident, the congresswomen may have chosen to seek support from other people or each other to deal with the incident. In a scenario in which someone encounters bias, perceptions of who will be an ally may influence who they seek social support from. In the case of the congresswomen encountering racial bias, they may have chosen to seek support from individuals sharing their racial or ethnic identity, gender, or from other women of color. Additionally, the congresswomen could have considered past anti-racist action of potential allies to determine who would support them.

Discrimination, or differential treatment based on social group membership, is a pervasive societal problem associated with negative mental and physical health for those targeted (Swim et al., 2001; Triana et al., 2015). When faced with discrimination, people may choose to seek support from others, who they may consider to be allies. In our studies, we are interested in who is perceived to be an ally by individuals facing discrimination. For people encountering discrimination, the decision of who to turn to may be critical in determining whether they experience support or denial of their experiences. This is because claiming discrimination often carries interpersonal risks. Targets of discrimination who attribute negative outcomes to

discrimination instead of other factors can be viewed more negatively as a “complainer” (Kaiser & Miller, 2001, 2003).

At the same time, having supportive allies can be beneficial for individuals targeted by discrimination. Moser and Branscombe (2021) investigated women’s perceptions of support in a STEM work context while manipulating the presence or absence of a male ally and a gender balanced or imbalanced work team. Participants exposed to a gender imbalanced work team with no male ally anticipated less support from their coworkers than participants exposed to a gender imbalanced work team with a male ally and both gender balanced work team conditions. In other words, the presence of a male ally who expressed gender equality support buffered the trend of anticipating lower support. Moser and Branscombe (2021) also found that both Black and White women anticipated comparable support, respect, and relatively lower workplace hostility in a work team with a Black or White male ally present versus no ally present. Researchers have also demonstrated that confrontations of bias from an ally along with bystander support can help buffer against the negative impacts of offensive racist and sexist comments for targeted individuals (Hildebrand et al., 2020). Although claiming discrimination can be costly, having supportive others is beneficial. Therefore, individuals likely use discretion when determining who will be an ally when they encounter bias.

We propose that race, ethnicity, gender, and the past behavior of potential allies can serve as cues that people facing discrimination may use to determine who will support them.

Additionally, not all people facing discrimination are likely to view the same individuals as allies. Perceptions of support will also depend on perceiver identities, whether the perceiver and potential ally have shared stigmatized identities, and the type of bias encountered. Before

understanding to whom people turn to for allyship, it is first useful to explore *why* people may turn to others after facing discrimination and how this support can be beneficial.

Discrimination is stressful, and people often seek help from others when experiencing stress. Carter and Forsyth (2010) recruited Black, Asian American, Latino, American Indian, and Biracial participants and surveyed their personal experiences with racism as well as their help-seeking tendencies after a discriminatory event. Participants most commonly reported feeling disrespected, angry, insulted, and disappointed after the event and 78% of participants described the experience as stressful. Among participants, 57% sought help from others to deal with the discriminatory experience including friends, family, spouses, colleagues (17% - 41% of the sample) and professionals (< 10%) while other participants did not report seeking help from others (43%). However, Carter and Forsyth (2010) did not investigate participants' decision-making process of whether and with whom to seek help nor did they investigate the social identities (e.g., race/ethnicity, gender) of the individuals they sought help from.

The motivation to seek social support from others in stressful situations, such as when one has experienced discrimination, can be understood by looking at people's tendencies for using social sharing or interpersonal emotion regulation to cope with stress. These strategies of sharing negative emotions with others (i.e., social sharing) or speaking with someone else with the specific goal of changing or maintaining one's own emotions (i.e., interpersonal emotion regulation) are common tools used when experiencing stress (Rimé, 2009; Zaki & Williams, 2013). For instance, Liu et al., (2021) investigated interpersonal emotion regulation among participants over two weeks and found that 85% of the sample reported sharing a negative emotional experience with someone else at least once. Additionally, people who report having stronger social support systems, and therefore have people to turn to when facing stressful life

events, also tend to live longer lives and experience fewer mental and physical health problems (Taylor, 2011). Therefore, if people perceive that they have friends, colleagues, or loved ones to support them if they were to encounter stress, which may include discrimination, this may be beneficial to their ability to cope.

## **1.1 Factors Influencing Allyship Perceptions**

Perceptions of someone's willingness to provide support may depend on characteristics of the perceiver and on stereotypes associated with potential allies' race/ethnicity and gender.

Additionally, because discrimination is a personal experience that occurs within the context of a group level identity (Schmitt et al., 2003), people coping with discrimination may seek social support from someone with a shared stigmatized identity, reasoning that they may have had similar discriminatory experiences in the past and will be able to empathize.

### **1.1.1 Perceiver Race/Ethnicity and Gender**

Characteristics of the person encountering bias may influence their perceptions of supportive others. Another model that may help in understanding what groups anticipate higher support is the Racial Position Model (Zou and Cheryan, 2017). The model argues that while Black and Latino Americans are more likely to experience stereotypes associated with being perceived as lower status as compared to White and Asian Americans, Latino and Asian Americans are more likely to encounter bias associated with being perceived as foreign relative to White and Black Americans. Taking into consideration that groups who perceive similarity in discrimination experiences are more likely to support each another (Craig and Richeson, 2016), one might expect that Latino Americans would anticipate higher support on average compared to other groups due experiencing similar stigmas with more groups (i.e., both Black and Asian Americans). Looking to trends of seeking social support and gender, women tend to rely on

others more so than men (Taylor et al., 2000; Taylor, 2011), which could result in women as compared to men perceiving more people to be supportive allies.

### **1.1.2 Group-Specific Stereotypes**

People may also use racial and gender stereotypes when considering whether another person will provide social support after they experience discrimination. There is evidence to suggest that people of color may view other allies of color and White allies as distinct. Brown and Ostrove (2013) asked undergraduate students of color to share their perceptions of allies of color of a different racial or ethnic group than their own and White allies, among individuals they personally knew. They found that participants perceived allies of color to be more willing to engage in racial issues as compared to White allies. These findings suggest that potential allies of color relative to White potential allies could be perceived as more willing to provide support. However, the researchers did not compare perceptions between racial/ethnic minority groups for perceivers or allies.

Past research has also demonstrated that perceivers view emotions of expressors in a way that is consistent with racial stereotypes, which may be relevant for perceiving whether individuals will become upset or angry enough to take action after discrimination. Hugenberg (2005) found that European American participants were quicker to categorize Black faces as having an angry expression as compared to White faces with an angry expression. In the context of stereotypes about activists against racial injustice, Black activists were also stereotyped as more angry than White activists (Burrows et al., 2021). Additionally, Adam and Shirako (2013) reported that predominately European American participants stereotyped East Asians as less emotionally expressive relative to European Americans and Hispanics, with no significant differences between ratings for European Americans and Hispanics in emotional expressiveness. Although

these studies were limited by studying predominately White participants, there is reason to believe these cultural stereotypes may generally hold for all perceivers, and therefore influence perceptions of a potential allies' anger and willingness to take action in response to a discriminatory racist or sexist incident.

Additional gender-related stereotypes may also influence perceptions of allyship. For example, women, more so than men, are commonly leaned on for general social support (Taylor et al., 2000; Taylor, 2011). Babbitt et al. (2018) additionally found that Black participants perceived White women to be less racially biased relative to White men, which suggests that perceptions of support could vary by stereotypes of both race/ethnicity and gender.

### **1.1.3 Shared Stigmatization**

In a situation in which a person of color experiences racism or a women experiences sexism, these targeted individuals may choose to seek support from people who share their stigmatized identity. The Rejection Identification Model proposes that when people with stigmatized identities experience discrimination, this leads to an increase in identification with one's own stigmatized identity, which leads to a rejection of the dominant group (Branscombe et al., 1999). Experiencing discrimination could therefore lead to seeking support within one's own ingroup, thereby potentially reducing anticipated support from others. However, whether someone else is viewed as an ingroup or outgroup member may be context or person dependent, especially when considering both intersectional and coalitional perspectives on group identity.

Using an intersectional lens, we can consider how multiple dimensions of stigmatization may interact to produce distinct experiences for people with marginalized identities and as well as how these experiences influence allyship perceptions (Crenshaw, 1990). A shared stigmatized identity could be race, ethnicity, or gender in the context of experiencing racism or sexism. For



example, if an Asian woman experiences sexism, we could ask whether she will view another Asian woman as more supportive than a White woman, considering she has multiple stigmatized identities shared with the Asian woman. Identity consists of a multitude of factors which may be relevant to allyship perception.

In the realm of coalitional perspective on identity, Craig and Richeson (2016) proposed that individuals with a particular stigmatized identity choose to support or derogate individuals with another stigmatized identity will depend on factors including intergroup contact, perceived goal similarity, and perceived similarity in discrimination experiences. Therefore, if targets of discrimination do perceive potential allies as having some shared experience of having encountered discrimination, they may also anticipate higher support from those potential allies. However, Craig and Richeson (2016) also argue that the dimension of stigmatization plays an important role, in that people with stigmatized identities along the same dimension of identity (e.g., Black and Latino men) may anticipate more support from each other than a group with a differently stigmatized identity (e.g., White women). Returning to the Racial Position Model, one might also expect groups that experience similar negative stereotypes to experience higher support from one another relative to other racial and ethnic groups (e.g., Black Americans would anticipate more support from Latino Americans as compared to Asian and White Americans). Keeping in mind that perceptions of ingroup and outgroup identities is complex, the perception that a potential ally shares one's identity or identities plays an important role in perceiving that individual to be supportive.

#### **1.1.4 Past Behavior**

Considering that past behavior tends to predict future behavior (Ouellette & Wood, 1998), people with stigmatized identities may use a record of past anti-racist or anti-sexist behavior as

an indicator of whether a person will support them after they experience discrimination. In a review of allyship behaviors in the workplace, Salter & Migliaccio (2019) identified three domains of behavior that are critical to support marginalized individuals and to combat discrimination. The first, knowledge and awareness, consists of self-education about discrimination that stigmatized groups face and acknowledging one's own social privilege. The second, communication and confrontation, entails being willing to engage with others by discussing the importance of addressing existing inequality and confronting bias in everyday life. The third domain, action and advocacy, includes behaviors such as attending protests, signing petitions, as well as donating time and money to anti-discrimination causes. People with stigmatized identities may consider all three forms of allyship behavior in determining whether someone will be an ally in the future.

There is also evidence to suggest that the past behavior of ingroup and outgroup members will be perceived somewhat differently. Moy & Ng (1996) found that participants perceived past discriminatory behavior in the form of unequal resource allocation as less likely to be the actions of their own novel ingroup (e.g., the red team) as compared to a novel outgroup, suggesting that people place more trust in their ingroup relative to outgroups and this trust impacts the perceptions of their behavior. Based on this evidence, perceivers may view the behavior of ingroup and outgroup members differently.

## **1.2 Overview of the Present Research**

In the current work we were interested in whether the race/ethnicity, gender, and past behavior of a potential ally influences allyship perceptions. In Study 1 we investigated Black, Hispanic, and Asian participants' perceptions of allies in a context in which they were imagining having experienced racial bias, whereas in Study 2, we investigated women's perceptions of allies after

experiencing gender bias. In both studies, participants read a variety of vignettes in which we manipulated the race/ethnicity, gender, and past behavior of a potential ally. After each vignette, we asked participants the extent to which they would anticipate support from each person if they were to experience discrimination. In Study 1, we specifically tested whether Black, Hispanic, and Asian participants anticipated different levels of support and whether anticipated support varied between male and female participants. We also tested whether perceived support was influenced by race/ethnicity and gender-specific stereotypes of potential allies, shared stigmatization (shared race/ethnicity or gender), or past allyship behavior.

## 2. Study 1 Method

### 2.1 Participants

Participants volunteered to complete the study on the Project Implicit research website (<https://implicit.harvard.edu>). We aimed to recruit approximately 300 participants from three racial or ethnic groups (Black, Hispanic, and Asian) based on our pre-registered plan to collect 900 usable participant responses in order to have 80% power to detect an effect size of  $f^2 = .00874$  for a single regression coefficient in a linear multiple regression with 15 predictors. Participants were eligible if they were 18 or older, identified as a U.S. resident or citizen and as monoracial/ethnic Black, Hispanic, or Asian. We collected 1225 participants and excluded 282 participants for leaving the study before completing the primary measures, five participants for declining to respond to all primary measures, and seven participants for missing data due to technological issues.

The final sample ( $N = 931$ ) included 316 participants identifying as Black or African American, 311 participants identifying as Hispanic, Latino or Spanish Origin, and 304 participants identifying as Asian. The sample was 66.2% female, 30.7% male, 2.1% other gender identities, and 0.9% of participants did not report gender. Participant mean age was 34.2 years ( $SD = 13.9$ ). Ideologically, 53.2% identified as liberal, 28.1% identified as moderate, 14.6% identified as conservative, and 4.1% did not report their political ideology.

### 2.2 Procedure

After consenting, participants were told that they would be asked about their perceptions about people. Participants were then randomly assigned to complete two of four potential blocks of

questions assessing their perceived likelihood that an imagined acquaintance would support them if someone were to make an offensive comment about their race (for Black and Asian participants) or ethnicity (for Hispanic participants). The four potential blocks included vignettes mentioning that their imagined acquaintance – their potential ally – had taken part in one of various types of allyship behavior including education, interpersonal action, or political action. Alternatively, they were told about the potential ally without any mention of past allyship behavior. For each block, participants were asked to report the likelihood of support for potential allies with eight different identity combinations (Black, Hispanic, Asian, or White; man or woman). This resulted in 16 total vignettes each for the education, interpersonal action, or political action blocks (two different behaviors per block) and eight vignettes for the no past behavior block. After completing two blocks of questions, participants completed several exploratory measures: the Black-White Race Attitude Implicit Association Test, the Modified Everyday Discrimination Scale, and one item assessing subjective socio-economic status. Participants were then debriefed.

## **2.3 Materials**

### **2.3.1 Potential Ally Vignettes**

In each of the four possible question blocks, participants were asked to imagine that they have an acquaintance who is either described as Black, Hispanic, Asian, or White and as either as a woman or a man, resulting in eight possible identity combinations randomly presented within subjects for each past behavior (e.g., “Imagine you had an acquaintance who was an Asian woman”).

Following the sentence mentioning the imagined acquaintance’s race/ethnicity and gender, participants were either told about the person’s past allyship behavior or nothing at all (i.e., no

sentence about past behavior was present). When participants were randomly assigned to learn about past allyship behavior, they learned that their imagined acquaintance had either self-educated themselves about discrimination that the participants' racial or ethnic group experiences currently in the U.S. or throughout history (i.e., education), participates in discussions about inclusivity or confronts offensive comments (i.e., interpersonal action), or attends political protests or donates their time and money to organizations to support the participants' racial or ethnic ingroup (i.e., political action). Alternatively, in the no past behavior block condition, no information was mentioned about the potential ally's past behavior. The various allyship behaviors that the potential allies were described as having taken part in were developed based on Salter and Migliaccio's (2019) review of supportive allyship behaviors.

More specifically, in the education block, participants were told that their acquaintance has educated him or herself about discrimination that the participant's racial or ethnic group (Black, Hispanic, or Asian people) experience either currently in the United States or throughout American history (e.g., "She informs herself about how Hispanic people have been discriminated against throughout the course of American history").

In the interpersonal action block, participants were told that their acquaintance participants in discussions about how to be more inclusive to the participants' racial or ethnic group at work or that the acquaintance confronts offensive comments in person or online that they hear about the participant's racial or ethnic group (e.g., "He confronts offensive comments about Black people he hears in person or sees online").

In the political action block, participants were told that their acquaintance either attends political protests advocating for racial justice for the participant's racial or ethnic group or donates their

time and money to organizations to support the participants' racial or ethnic group (e.g., "She donates her time and money to organizations that support Asian people in her community.").

All participants were randomly presented with two of four potential blocks of vignettes (education, interpersonal action, political action, or no behavior). All vignettes within each block were presented in random order.

### **2.3.2 Dependent Measure**

#### **Perceived Support**

After each potential ally vignette, participants were asked two questions to assess the extent to which they anticipated that each potential ally would support them if they were to experience racial or ethnic discrimination. To assess perceptions that potential allies would respond emotionally on the participant's behalf we asked: "What is the likelihood that [she/he] would become angry on your behalf if someone made an offensive comment to you based on your [race/ethnicity]?" The question was measured on a 5-point scale of -2 (*Extremely unlikely*) to 2 (*Extremely likely*). To assess perceptions that the potential ally would take action to support the participant we asked: "What is the likelihood that [she/he] would take action to support you if someone made an offensive comment to you based on your [race/ethnicity]?" The question was also measured on a 5-point scale of -2 (*Extremely unlikely*) to 2 (*Extremely likely*). Responses to these two questions were averaged together to form the perceived support outcome variable ( $\omega = .90$ ). We developed these questions to probe perceptions that someone would become angry and take action because anger about inequality and willingness to take action to reduce inequality have been associated in past studies (Gill & Matheson, 2006; Leach et al., 2006; Radke et al., 2020).

### **2.3.3 Exploratory Measures**

The following measures were included for exploratory purposes. Exploratory analyses involving the Modified Everyday Discrimination Scale are reported in the results, but analyses including the Race Implicit Association Test and MacArthur Scale of Subjective Social Status have not been conducted for this report.

#### **Black-White Race Attitude Implicit Association Test (IAT)**

Participants completed an Implicit Association Test (Greenwald et al., 1998) assessing the relative strength of implicit associations for Black and White faces with good and bad words (e.g., peace, laughter, evil, hurt). Participants were asked to sort images of Black and White faces and good or bad words to the left or right of the screen as quickly as they could while maintaining accuracy. In the first block of 20 trials, participants categorized images of Black faces and White faces to the categories “Black People” and “White People” on either side of the screen. In the second block of 20 trials, participants categorized good and bad words to the left or right of the screen. In the third block (20 trials) and fourth block (40 trials), participants were asked to sort the images of Black and White faces and good and bad words to the left or right of the screen. Participants were randomly assigned to pair “Black people” with good words and “White people” with bad words or the reverse. In the fifth block (30 trials) participants then sorted images of Black and White faces after the categories had changed sides of the screen. In the sixth block (20 trials) and final seventh block (40 trials), participants sorted the images and words with the opposite pairing than they had previously encountered. Implicit racial preferences for White vs. Black people were scored using the *D2* algorithm, which compares reaction times for sorting for trials where good words were paired with “Black People” and bad words was paired with “White People” against reaction times for trials where bad words were paired with “Black People” and good words were paired with “White People” (Greenwald et al., 2003).



### **Modified Everyday Discrimination Scale**

Participants completed an eight-item scale to assess severity of experiences with discrimination based on race and ethnicity (example item: In the past 12 months, how often have you been treated with less respect than other people because of your race/ethnicity?) (original scale: Williams et al., 1997; modified scale: Kim et al., 2014). The scale was highly reliable ( $\omega = .92$ ), and reliability was consistent across participant racial/ethnic groups ( $\omega = .88-.92$ ).

### **MacArthur Scale of Subjective Social Status (Adler et al., 2000)**

To assess subjective socio-economic status, participants were asked to place themselves on a ladder with 10 rungs (scale: 1-10), representing where people stand in the United States, with those who have the most money, best education, and most respected jobs at the top and those with the least money, least education, and least respected job or no job at the bottom.

### 3. Study 1 Results

We conducted linear mixed models with maximum likelihood fit to best assess differences based on participants characteristics, potential ally manipulations, and their interactions. Analyses were preregistered as ordinary least squares (OLS) multiple regression analyses, but due to the dependencies present in the data, we shifted our analyses to use mixed models (preregistration: [https://osf.io/8br4p/?view\\_only=e2873297f94a2097790fe24919c4ef](https://osf.io/8br4p/?view_only=e2873297f94a2097790fe24919c4ef)). With the outcome variable items of anger and take action averaged together, the intraclass correlation for a model with participants as the random intercept and no predictors included was .363, indicating that 36.3% of the variance in the outcome of perceptions of support was between participants and 63.6% of the variance in perceptions of support was within participants' responses. In addition to conducting analyses with the perceptions of support items of perceived supportive anger and perceived supportive action averaged, we planned to also conduct analyses with the items as separate outcome variables. Because the two items had high reliability, to avoid redundancy we focus the results here on only the aggregated outcome of the two items. Preregistered analyses using OLS multiple regression that do not account for the multilevel data structure as well as analyses conducted separately for the two outcome variable items are not included in this master's thesis manuscript and will be included in a supplement written in the future.

For all models reported we included a random intercept of participant. As a rule, when including predictors in the model that were manipulated within subjects (i.e., potential ally race/ethnicity, gender, or past behavior), we also included a random slope of participant by the within subject predictor so that the models could take into account that the effects from the within subjects' predictors could vary across participants. If models did not converge with all random slopes

entered for within subjects predictors, we followed recommendations outlined by Brown (2021) to first adjust optimizers. If no optimizers resolved convergence problems, we adjusted the random effect structure to remove a within subject predictor by participant slope estimate. We note which models needed random effect structure adjustments throughout. Model estimated (adjusted) means and standard errors are reported. We report likelihood ratio tests with chi square values to compare full (hypothesized) models to reduced models in order to determine whether the predictors explain significant variance, as recommended by Brown (2021). We report  $R^2$  following calculations recommendations by Johnson (2014) for mixed models. Analyses were conducted in R (R Core Team, 2021) with lme4 (Bates et al., 2015), afex (Singmann et al., 2021), and emmeans packages (Lenth et al., 2022).

### **3.1 Perceiver Race/Ethnicity and Gender**

We first tested whether participants' racial/ethnic group and gender predicted differences in average levels of perceived support from allies. With a model including participant race or ethnicity as a predictor ( $\chi^2(2) = 11.99, p = .002$ ; See Table 1), we found that Hispanic participants reported higher levels of average perceived support ( $M = 0.81, SE = 0.03$ ) than Black participants ( $M = 0.66, SE = 0.03; M_D = -0.16, SE = 0.05, z = -3.42, p = .002$ ). Asian participants' average perceived support ( $M = 0.76, SE = .03$ ) fell in between the other two groups and was not significantly different than either (Asian-Black:  $p = .054$ ; Asian-Hispanic:  $p = 0.23$ ). For all post hoc tests, we used Holm adjustments for multiple tests.

To assess whether participant gender predicted average levels of perceived support we included gender as a dichotomous variable (female or male) in a separate model. We found no differences between women ( $M = 0.73, SE = 0.02$ ) and men ( $M = 0.76, SE = 0.03$ ) in average levels of perceived support ( $\chi^2(1) = 0.57, p = .45$ ; See Table 2).

**Table 1**  
Mixed Model Predicting Anticipated Support from Participant  
Race/Ethnicity

Predictors	<i>b</i>	<i>SE</i>	95% <i>CI</i>
(Intercept)	0.76*	0.03	0.69, 0.82
Black	-0.10*	0.05	-0.20, -0.01
Hispanic	0.06	0.05	-0.04, 0.15
$\sigma^2$	0.56		
ICC	0.36		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.005		

*Note.* Asian participants are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 2**  
Mixed Model Predicting Anticipated Support from Participant  
Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	95% <i>CI</i>
(Intercept)	0.76*	0.03	0.69, 0.83
woman	-0.03	0.04	-0.11, 0.05
$\sigma^2$	0.56		
ICC	0.37		
$N_{\text{participant}}$	903		
Observations	25058		
$R^2$	< 0.001		

*Note.* Male participants are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

### 3.2 Group-Specific Stereotypes

We next tested whether perceptions of support varied based on potential ally characteristics of race/ethnicity and gender. To evaluate whether the potential ally manipulations of race/ethnicity and gender influenced participant perceived support, we first entered potential ally race/ethnicity into the model as a dichotomous predictor coded as person of color (POC, including Black,

Hispanic, and Asian identities) or White. We found a significant effect of potential ally race/ethnicity ( $\chi^2(1) = 325.60, p < .001$ ; See Table 3). Participants anticipated more support from people of color ( $M = 0.84, SE = 0.02$ ) as compared to White people as potential allies ( $M = 0.46, SE = 0.03$ ). When separately entering potential ally race/ethnicity in the model coded as Black, Hispanic, Asian, or White, we found potential ally race/ethnicity was again a significant predictor of perceived support ( $\chi^2(3) = 426.05, p < .001$ ; See Table 4). Averaging across participants, the highest level of support was anticipated from Black potential allies ( $M = 1.08, SE = 0.02$ ), followed by Hispanic ( $M = 0.83, SE = 0.02$ ), Asian ( $M = 0.60, SE = 0.03$ ), and White potential allies ( $M = 0.46, SE = 0.03$ ). All groups had significantly different ratings from other groups (all  $ps < .001$ ).

**Table 3**  
Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity (POC or White)

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.84*	0.02	0.80, 0.87
White	-0.37*	0.02	-0.41, -0.34
$\sigma^2$	0.49		
ICC	0.43		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.029		

*Note.* Potential allies of color are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 4**  
Mixed Model Predicting Anticipated Support from Potential Ally

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.60*	0.03	0.55, 0.65
Black	0.47*	0.03	0.42, 0.53
Hispanic	0.23*	0.02	0.18, 0.27
White	-0.14*	0.02	-0.18, -0.10
$\sigma^2$	0.34		
ICC	0.60		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.061		

*Note.* Asian potential allies are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

We then separately tested whether the manipulated gender of the potential allies was a significant predictor of perceived support. We found that participants anticipated more support from women ( $M = 0.80$ ,  $SE = 0.02$ ) as compared to men as potential allies ( $M = 0.69$ ,  $SE = 0.02$ ;  $\chi^2(1) = 144.58$ ,  $p < .001$ ; See Table 5).

We then tested whether perceived support from potential allies could be predicted from the interaction of potential ally race/ethnicity and gender. The interaction was significant ( $\chi^2(3) = 22.48$ ,  $p < .001$ ); See Table 6 and Figure 1. Follow up tests revealed that participants anticipated the most support from Black women ( $M = 1.13$ ,  $SE = 0.02$ ), followed by Black men ( $M = 1.02$ ,  $SE = 0.02$ ), Hispanic women ( $M = 0.88$ ,  $SE = 0.02$ ), Hispanic men ( $M = 0.78$ ,  $SE = 0.02$ ), Asian women ( $M = 0.64$ ,  $SE = 0.03$ ), Asian men ( $M = 0.57$ ,  $SE = 0.03$ ), White women ( $M = 0.54$ ,  $SE = 0.03$ ), and White men ( $M = 0.38$ ,  $SE = 0.03$ ). All groups had significantly different ratings ( $ps < .001$ ) except perceptions of Asian men and White women ( $p = .37$ ).

**Table 5**

Mixed Model Predicting Anticipated Support from Potential Ally Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.69*	0.02	0.65, 0.72
woman	0.11*	0.01	0.09, 0.13
$\sigma^2$	0.56		
ICC	0.37		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.004		

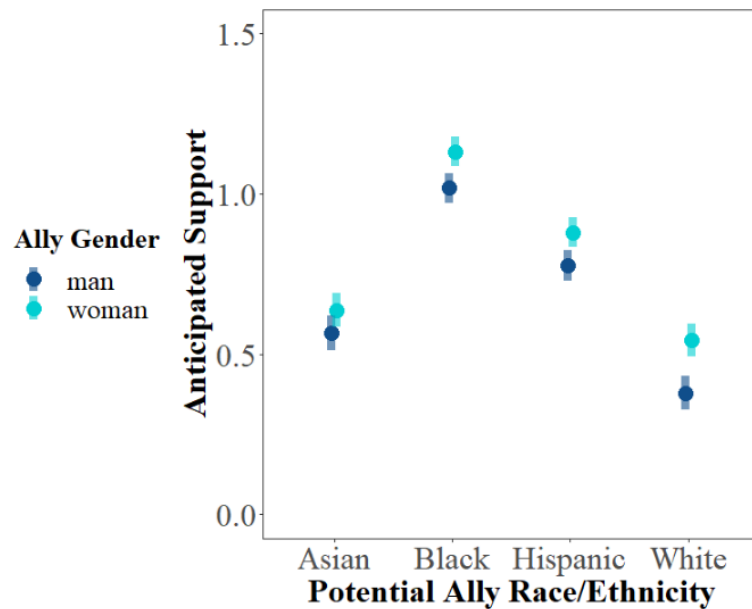
*Note.* Male potential allies are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 6**

Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity and Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.57*	0.03	0.51, 0.62
Black	0.45*	0.03	0.39, 0.51
Hispanic	0.21*	0.02	0.16, 0.26
White	-0.19*	0.02	-0.23, -0.14
woman	0.07*	0.02	0.04, 0.10
Black:woman	0.04*	0.02	0.00, 0.08
Hispanic:woman	0.03	0.02	-0.01, 0.07
White:woman	0.09*	0.02	0.05, 0.13
$\sigma^2$	0.33		
ICC	0.61		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.065		

*Note.* Asian and male potential allies are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 1**

Anticipated Support Predicted from Potential Ally Race/Ethnicity and Gender

Note. Anticipated Support axis (-3 = *Extremely unlikely* to 3 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals

### 3.3 Shared Stigmatization

Next, we evaluated whether shared (stigmatized) identities between the perceiver and the potential ally influenced anticipated support by evaluating shared race/ethnicity and gender.

We first tested whether the participant and the potential ally having the same race/ethnicity (e.g., a Hispanic participant rating a Hispanic potential ally) relative to a different race/ethnicity would predict perceived support. Participants anticipated more support from potential allies of a shared race/ethnicity ( $M = 1.16, SE = 0.02$ ) as compared to potential allies of a different racial or ethnic group ( $M = 0.60, SE = 0.02; \chi^2(1) = 446.80, p < .001$ ; See Table 7).

We then tested whether there were differences between ratings for potential allies of shared racial/ethnic identity, other potential allies of color, and White potential allies. Potential allies with the same race/ethnicity as the participant were perceived as most supportive ( $M = 1.16, SE = 0.02$ ), followed by other potential allies of color (not sharing the participant's race/ethnicity)



( $M = 0.67$ ,  $SE = 0.02$ ) and then by White potential allies ( $M = 0.46$ ,  $SE = 0.03$ ;  $\chi^2(2) = 475.42$ ,  $p < .001$ ; See Table 8). All groups' ratings were significantly different from each other (all  $ps < .001$ ).

**Table 7**  
Mixed Model Predicting Anticipated Support from Same or Different Race/Ethnicity

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.60*	0.02	0.56, 0.64
Same race/ethnicity	0.56*	0.02	0.52, 0.61
$\sigma^2$	0.42		
ICC	0.49		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.067		

*Note.* Potential allies of different racial/ethnic groups relative to the participants are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 8**  
Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity: Same Race/Ethnicity, other People of Color or White

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.67*	0.02	0.63, 0.71
Same race/ethnicity	0.49*	0.02	0.45, 0.54
White	-0.21*	0.02	-0.24, -0.17
$\sigma^2$	0.38		
ICC	0.54		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.075		

*Note.* Other potential allies of color are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

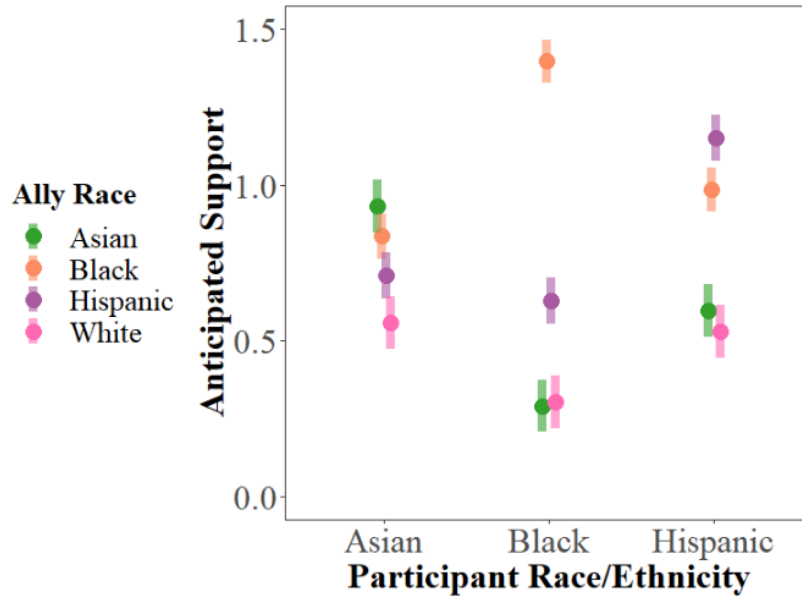
We then asked whether perceptions of support based on potential ally race/ethnicity would depend on participant race/ethnicity. The interaction was significant ( $\chi^2(6) = 641.44, p < .001$ ; See Table 9 and Figure 2). Participants generally perceived potential allies of their shared race/ethnicity as most supportive and then participants viewed Black potential allies as most supportive followed by Hispanic, Asian, and White potential allies. For Black participants, Black people were perceived as most supportive ( $M = 1.40, SE = 0.04$ ) followed by Hispanic people ( $M = 0.63, SE = 0.04$ ), and then by White people ( $M = 0.30, SE = 0.04$ ) and Asian people ( $M = 0.29, SE = 0.04$ ). For Black participants, all differences were significant ( $ps < .001$ ) except between White and Asian potential allies ( $p = 1.00$ ). For Hispanic participants, Hispanic potential allies were perceived as most supportive ( $M = 1.15, SE = 0.04$ ), followed by Black potential allies ( $M = 0.98, SE = 0.04$ ), then by Asian potential allies ( $M = 0.60, SE = 0.04$ ) and White potential allies ( $M = 0.53, SE = 0.04$ ). All differences were significant ( $ps < .001$ ) except between Asian and White potential allies ( $p = .60$ ). For Asian participants, Asian potential allies ( $M = 0.93, SE = 0.04$ ) and Black potential allies ( $M = 0.84, SE = 0.04$ ) were perceived as most supportive followed by Hispanic potential allies ( $M = 0.71, SE = 0.04$ ), and then by White potential allies ( $M = 0.56, SE = 0.04$ ). For Asian participants, all differences were significant ( $ps < .002$ ) except between Asian and Black potential allies ( $p = .21$ ).

**Table 9**

Mixed Model Predicting Anticipated Support from Participant and Potential Ally  
Race/Ethnicity

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.93*	0.04	0.85, 1.02
Black participants	-0.64*	0.06	-0.76, -0.52
Hispanic participants	-0.34*	0.06	-0.45, -0.22
Black allies	-0.10*	0.04	-0.18, -0.02
Hispanic allies	-0.22*	0.03	-0.29, -0.15
White allies	-0.37*	0.04	-0.44, -0.30
Black participants:Black allies	1.20*	0.06	1.09, 1.31
Hispanic participants:Black allies	0.48*	0.06	0.37, 0.60
Black participants:Hispanic allies	0.56*	0.05	0.46, 0.66
Hispanic participants:Hispanic allies	0.78*	0.05	0.68, 0.87
Black participants:White allies	0.39*	0.05	0.29, 0.49
Hispanic participants:White allies	0.31*	0.05	0.21, 0.41
$\sigma^2$	0.34		
ICC	0.57		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.115		

*Note.* Asian participants and Asian potential allies are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 2**

Anticipated Support Predicted from Participant Race/Ethnicity and Potential Ally Race/Ethnicity  
*Note.* Anticipated Support axis (-2 = *Extremely unlikely* to 2 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals.

Next, we separately tested whether the participant and the potential ally having the same gender (e.g., female participant rating female potential ally) or a different gender would predict perceptions of support. Potential allies with the same gender as the participant ( $M = 0.78$ ,  $SE = 0.02$ ) were perceived as more supportive than potential allies with a different gender ( $M = 0.71$ ,  $SE = 0.02$ ;  $\chi^2(1) = 47.66$ ,  $p < .001$ ; See Table 10).

To further understand whether both men and women perceived a same-gender potential ally as more supportive, we then conducted a 2 (participant gender) by 2 (potential ally gender) exploratory analysis. To get this model to converge, we had to simplify the random effect to only estimate random intercepts. Although there was a significant interaction ( $\chi^2(1) = 8.14$ ,  $p = .004$ ; See Table 11), both women and men perceived women to be more supportive than men (women:  $M_{Women} = 0.79$ ,  $M_{Men} = 0.66$ ,  $b = 0.13$ ,  $SE = 0.01$ ,  $z = 11.52$ ,  $p < .001$ ); men:  $M_{Women} = 0.80$ ,  $M_{Men}$

= 0.72,  $b = 0.07$ ,  $SE = 0.04$ ,  $z = 4.38$ ,  $p < .001$ ). The interaction revealed that men perceived women as more supportive as compared to how women perceived men ( $b = -0.13$ ,  $SE = 0.04$ ,  $z = -3.01$ ,  $p = 0.016$ ). Overall, this analysis revealed that women were driving the effect of perceiving same-gender potential allies as more supportive relative to different-gender potential allies.

**Table 10**  
Mixed Model Predicting Anticipated Support from Same or Different Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.71*	0.02	0.67, 0.75
Same gender	0.07*	<0.01	0.05, 0.09
$\sigma^2$	0.56		
ICC	0.37		
$N_{\text{participant}}$	923		
Observations	25650		
$R^2$	0.001		

*Note.* Potential allies of a different gender relative to the participant are the reference group (dummy coded as 0).  $b$  values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 11**  
Mixed Model Predicting Anticipated Support from Participant and Potential Ally Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.72*	0.04	0.65, 0.79
female participants	-0.06	0.04	-0.15, 0.02
female allies	0.07*	0.02	0.04, 0.11
female participants:female allies	0.06*	0.02	0.02, 0.10
$\sigma^2$	0.55		
ICC	0.37		
$N_{\text{participant}}$	903		
Observations	25058		
$R^2$	0.004		

*Note.* Male participants and male potential allies are the reference groups (dummy coded as 0).  $b$  values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

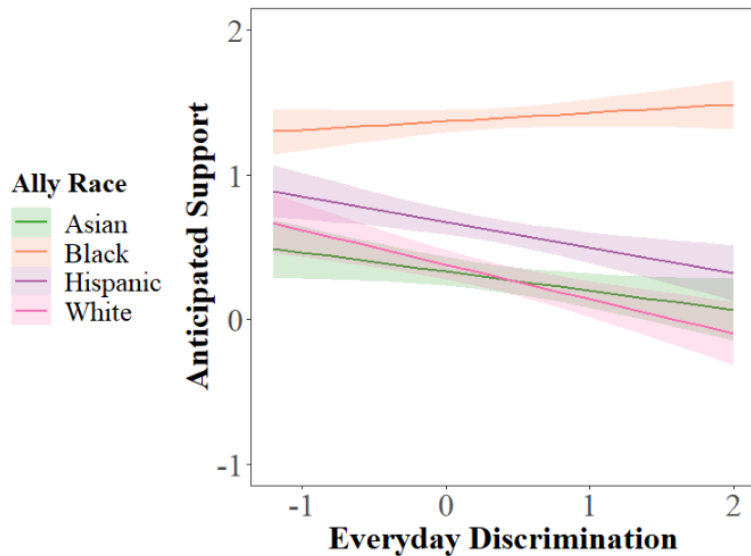
We next explored whether participants' past experiences with racism as measured by the Modified Everyday Discrimination Scale moderated the effect of potential ally race/ethnicity. To understand trends for each group uniquely, we ran analyses separately for Black, Hispanic, and Asian participant groups. For Black participants, we found a significant interaction of everyday discrimination and potential ally race/ethnicity ( $\chi^2(3) = 23.57, p < .001$ ; See Table 12 and Figure 3). A one unit increase in everyday discrimination for Black participants was associated with no significant differences in anticipated support from Black potential allies ( $b = 0.06$ ) but a significant decrease in anticipated support from Asian ( $b = -0.13$ ), Hispanic ( $b = -0.17$ ), and White potential allies ( $b = -0.24$ ). The slopes of the lines predicting anticipated support for Black and Asian potential allies were significantly different ( $b = 0.19, SE = 0.07, p = 0.004$ ) as were the slopes of the lines predicting support from Asian and White potential allies ( $b = -0.11, SE = 0.05, p = 0.02$ ).

**Table 12**

Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity and Everyday Discrimination for Black Participants

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.33*	0.05	0.23, 0.43
Black	1.04*	0.06	0.93, 1.15
Hispanic	0.34*	0.04	0.27, 0.41
White	0.05	0.04	-0.03, 0.12
EDS	-0.13*	0.06	-0.25, -0.02
Black:EDS	0.19*	0.07	0.06, 0.32
Hispanic:EDS	-0.04	0.04	-0.13, 0.04
White:EDS	-0.11*	0.05	-0.20, -0.01
$\sigma^2$	0.39		
ICC	0.55		
$N_{\text{participant}}$	287		
Observations	8131		
$R^2$	0.201		

*Note.* Asian potential allies are the reference group (dummy coded as 0). The Everyday Discrimination Scale (EDS) is mean centered. *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Figure 3**

Anticipated Supported Predicted from Potential Ally Race/Ethnicity and Everyday Discrimination for Black Participants

*Note.* Anticipated Support axis (-2 = *Extremely unlikely* to 2 = *Extremely unlikely*) is truncated to show differences. Lines represent means levels with 95% confidence intervals. Participant Everyday Discrimination Scale scores are mean centered at 0.

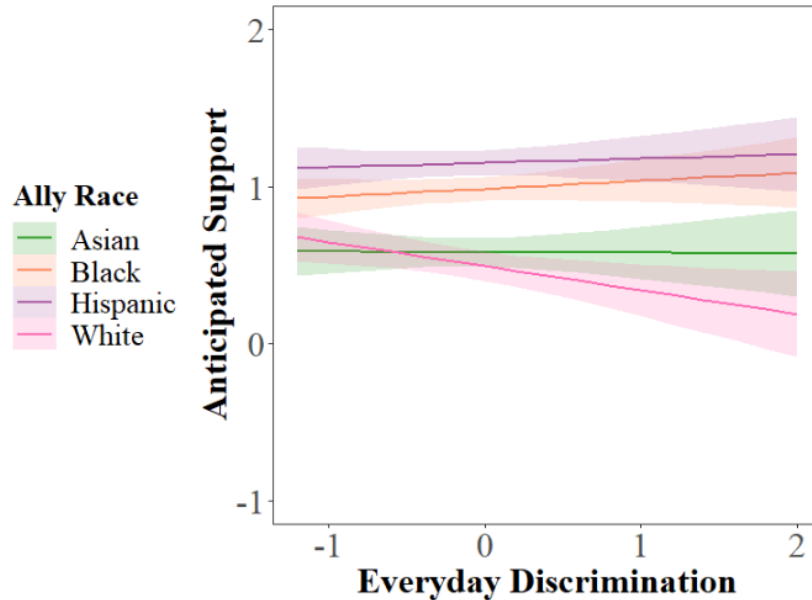
For Hispanic participants, we also found a significant interaction of everyday discrimination and potential ally race/ethnicity ( $\chi^2(3) = 15.85, p = .001$ ; See Figure 4 and Table 13). A one unit increase in everyday discrimination for Hispanic participants was associated with no differences in anticipated support from Hispanic ( $b = 0.03$ ), Black ( $b = 0.05$ ) and Asian potential allies ( $b = -0.00$ ) but was associated with a significant decrease in anticipated support from White potential allies ( $b = -0.15$ ). The slopes of the lines predicting anticipated support from Asian and White potential allies were significantly different ( $b = -0.15, SE = 0.05, p = 0.002$ ).

**Table 13**  
Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity and Everyday Discrimination for Hispanic Participants

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.58*	0.05	0.49, 0.67
Black	0.40*	0.04	0.33, 0.48
Hispanic	0.57*	0.04	0.49, 0.65
White	-0.09*	0.04	-0.16, -0.02
EDS	-0.00	0.06	-0.12, 0.12
Black:EDS	0.05	0.05	-0.04, 0.15
Hispanic:EDS	0.03	0.06	-0.08, 0.14
White:EDS	-0.15*	0.05	-0.24, -0.05
$\sigma^2$	0.33		
ICC	0.60		
$N_{\text{participant}}$	288		
Observations	7854		
$R^2$	0.084		

*Note.* Asian potential allies are the reference group (dummy coded as 0). The Everyday Discrimination Scale (EDS) is mean centered. *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.





**Figure 4**

Anticipated Support Predicted from Potential Ally Race/Ethnicity and Everyday Discrimination for Hispanic Participants

*Note.* Anticipated Support axis (-2 = *Extremely unlikely* to 2 = *Extremely unlikely*) is truncated to show differences. Lines represent means levels with 95% confidence intervals. Participant Everyday Discrimination Scale scores are mean centered at 0.

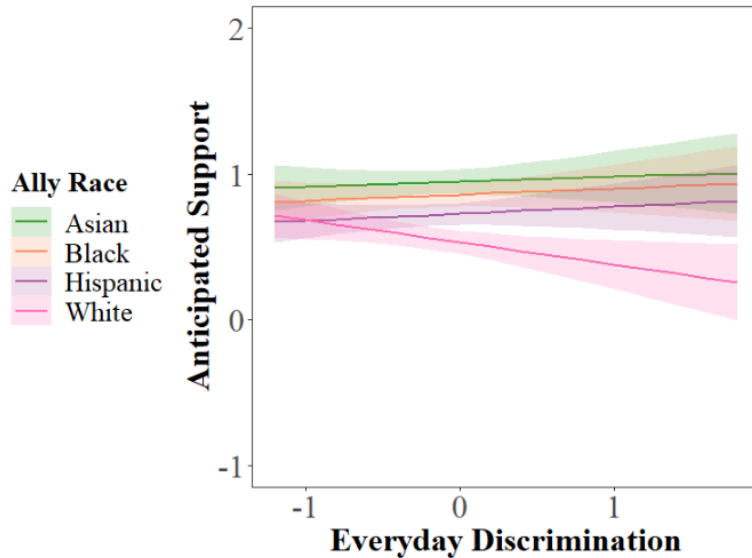
For Asian participants, we again found a significant interaction of everyday discrimination and potential ally race/ethnicity ( $\chi^2(3) = 23.57, p < .001$ ; See Figure 5 and Table 14). A one unit increase in everyday discrimination for Asian participants was associated with no differences in anticipated support from Asian ( $b = 0.03$ ), Black ( $b = 0.04$ ), or Hispanic potential allies ( $b = 0.05$ ) but was associated with a significant decrease in anticipated support from White potential allies ( $b = -0.15$ ). The slopes of the lines predicting anticipated support for Black and Asian potential allies were significantly different ( $b = 0.19, SE = 0.07, p = 0.004$ ) as were the slopes of the lines predicting support from Asian and White potential allies ( $b = -0.11, SE = 0.05, p = 0.02$ ).

**Table 14**

Mixed Model Predicting Anticipated Support from Potential Ally Race/Ethnicity and Everyday Discrimination for Asian Participants

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.95*	0.04	0.86, 1.03
Black	-0.09*	0.04	-0.16, -0.01
Hispanic	-0.22*	0.03	-0.28, -0.15
White	-0.42*	0.04	-0.50, -0.33
EDS	0.03	0.07	-0.10, 0.17
Black:EDS	0.01	0.06	-0.10, 0.13
Hispanic:EDS	0.02	0.05	-0.09, 0.12
White:EDS	-0.19*	0.07	-0.32, -0.06
$\sigma^2$	0.31		
ICC	0.55		
$N_{\text{participant}}$	285		
Observations	7955		
$R^2$	0.033		

*Note.* Asian potential allies are the reference group (dummy coded as 0). The Everyday Discrimination Scale (EDS) is mean centered. *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Figure 5**

Anticipated Supported Predicted from Potential Ally Race/Ethnicity and Everyday Discrimination for Asian Participants

*Note.* Anticipated Support axis (-2 = *Extremely unlikely* to 2 = *Extremely unlikely*) is truncated to show differences. Lines represent means levels with 95% confidence intervals. Participant Everyday Discrimination Scale scores are mean centered at 0.

### 3.4 Allyship Behavior

We then tested whether the type of past allyship behavior of the potential ally predicted perceptions of support, with past allyship behavior coded as education, interpersonal action, political action, or no behavior. We found that participants rated potential allies as most supportive when the potential allies were described as taking part in political action, followed by interpersonal action, education, and no information conditions ( $\chi^2(3) = 203.14, p < .001$ ); See Table 15 for model coefficients and Table 16 for model predicted means). All post hoc differences were significant ( $ps < .001$ ).

**Table 15**  
Mixed Model Predicting Anticipated Support from Potential Ally Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.48*	0.03	0.43, 0.54
Education	0.17*	0.03	0.12, 0.22
Interpersonal Action	0.30*	0.03	0.24, 0.36
Political Action	0.44*	0.03	0.38, 0.50
$\sigma^2$	0.49		
ICC	0.44		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.025		

*Note.* No information is the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 16**  
Model Predicted Means for Perceived Support from Potential Ally Past Behavior

Past Behavior	<i>N</i>	<i>M</i>	<i>SE</i>
No information	3648	0.48	0.03
Education	7110	0.65	0.03
Interpersonal Action	7451	0.79	0.03
Political Action	7649	0.92	0.03

We then asked whether the specific allyship behavior of the potential allies would predict perceived support. Among the seven individual vignettes, participants rated potential allies as most supportive when their past behavior included participating in protests (political), followed by donating time and money to organizations (political), confronting offensive comments (interpersonal), participating in discussions at work about inclusion (interpersonal), educating themselves about racial discrimination occurring in the present (education) and the past (education), and finally, potential allies with no past allyship information mentioned were rated the lowest ( $M = 0.50$ ,  $SE = 0.98$ ;  $\chi^2(6) = 357.09$ ,  $p < .001$ ); See Table 17 for model coefficients and Table 18 for model predicted means). There were no significant differences in ratings between donating time and money to organizations and confronting offensive comments ( $p = 1.00$ ), educating oneself about racial discrimination occurring in the past versus in the present ( $p = 1.00$ ), or participating in discussions on inclusion as compared with education in the past ( $p = 0.35$ ) or the present ( $p = 0.38$ ). All other differences between individual vignettes were significant ( $ps < .004$ ). We simplified the random effect structure of this model to only estimate the random slope of vignette type instead of the random slope for the individual so that the model would properly converge.

**Table 17**

Mixed Model Predicting Anticipated Support from Potential Ally Past Behavior: Individual Vignettes

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.48*	0.03	0.43, 0.54
Education past	0.17*	0.03	0.11, 0.22
Education present	0.17*	0.03	0.12, 0.23
Interpersonal confront	0.39*	0.03	0.32, 0.45
Interpersonal discuss	0.22*	0.03	0.16, 0.28
Political donation	0.38*	0.03	0.32, 0.44
Political protest	0.49*	0.03	0.44, 0.55
$\sigma^2$	0.48		
ICC	0.43		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.028		

*Note.* No information is the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 18**

Model Predicted Means for Perceived Support from Potential Ally Past Behavior: Individual Vignettes

Past Behavior Type	Individual Vignette	<i>N</i>	<i>M</i>	<i>SE</i>
No information	No information	3648	0.48	0.
Education	Self-educating about discrimination in the past	3557	0.64	0.
	Self-educating about discrimination in the present	3553	0.65	0.
Interpersonal Action	Discussing inclusivity at work	3724	0.70	0.
	Confronting offensive comments in person/online	3727	0.86	0.
Political Action	Donating time and money to organizations	3821	0.88	0.
	Participating in political protests	3828	0.99	0.

### 3.5 Perceiver Race/Ethnicity and Allyship Behavior

We next tested whether the differences in the perceptions of potential allies taking part in allyship behavior or not varied based on participant race/ethnicity. The interaction between

participant race/ethnicity and the dichotomous allyship behavior variable (any allyship behavior or no information) was not significant ( $\chi^2(2) = 2.63, p = .27$ ; See Table 19).

We then tested whether differences in perceptions of type of past allyship behavior varied based on participant race/ethnicity. With a model testing the interaction of allyship behavior (coded as either education, interpersonal action, political action, or no information) and participant race/ethnicity we again found no significant interaction ( $\chi^2(6) = 7.37, p = .29$ ; See Table 20), indicating that participants generally perceived political action as most supportive followed by interpersonal action, education, and no information and these perceptions did not vary significantly by participant race/ethnicity.

**Table 19**  
Mixed Model Predicting Anticipated Support from Participant Race/Ethnicity and Dichotomous Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.80*	0.03	0.73, 0.87
Black participants	-0.11*	0.05	-0.20, -0.01
Hispanic participants	0.08	0.05	-0.02, 0.17
No information	-0.28*	0.04	-0.36, -0.20
Black participants:No information	0.01	0.06	-0.11, 0.13
Hispanic participants:No information	-0.08	0.06	-0.19, 0.04
$\sigma^2$	0.54		
ICC	0.39		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.018		

*Note.* Asian participants and past allyship behavior are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 20**

Mixed Model Predicting Anticipated Support from Participant Race/Ethnicity and Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.52*	0.05	0.43, 0.61
Black	-0.11	0.07	-0.24, 0.02
Hispanic	0.01	0.06	-0.12, 0.13
Education	0.20*	0.05	0.11, 0.29
Interpersonal	0.26*	0.05	0.16, 0.37
Political action	0.40*	0.05	0.30, 0.50
Black:Education	-0.10	0.07	-0.23, 0.04
Hispanic:Education	0.00	0.06	-0.12, 0.13
Black:Interpersonal	0.01	0.08	-0.14, 0.15
Hispanic:Interpersonal	0.12	0.07	-0.03, 0.26
Black:Political action	0.05	0.07	-0.10, 0.19
Hispanic:Political action	0.07	0.07	-0.07, 0.21
$\sigma^2$	0.49		
ICC	0.43		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.031		

*Note.* Asian participants and no information about past behavior are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

### 3.6 Shared Stigmatization and Allyship Behavior

We then tested whether the interaction of shared or unshared racial/ethnic identity between

participants and potential allies and the dichotomous variable of participating in allyship

behavior or not predicted perceptions of support. The interaction of same or different

race/ethnicity and allyship behavior was significant ( $\chi^2(1) = 37.48, p < .001$ ; See Table 21).

Differences between having past allyship behavior or no information about past behavior for

same race potential allies were smaller (past behaviors:  $M = 1.20$ ;  $SE = 0.82$ ; no information:  $M$

$= 1.00, SE = 0.87$ ) as compared to differences between having past allyship behavior or no

information for potential allies with unshared racial/ethnic identities (past behaviors:  $M = 0.65$ ,

$SE = 0.92$ ; no information:  $M = 0.33$ ,  $SE = 0.96$ ). All group post hoc comparisons were significantly different ( $p < .001$ ).

**Table 21**  
Mixed Model Predicting Anticipated Support from Same or Different Race/Ethnicity and Dichotomous Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.66*	0.02	0.61, 0.70
Same race/ethnicity	0.53*	0.02	0.49, 0.58
No information	-0.35*	0.03	-0.40, -0.30
Same race/ethnicity:No information	0.17*	0.03	0.12, 0.23
$\sigma^2$	0.39		
ICC	0.53		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.079		

*Note.* Potential allies of different race/ethnicities (relative to the participant) and past allyship behavior are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

Next, we tested whether the interaction of shared or unshared racial/ethnic identity and allyship behavior type (coded as education, interpersonal, political or no information) predicted perceptions of support. The interaction of shared or unshared race/ethnicity and allyship behavior was again significant ( $\chi^2(3) = 127.98$ ,  $p < .001$ ; See Table 22). For perceptions of the potential allies with the same race/ethnicity as the participant, past behaviors of self-educating about discrimination ( $M = 1.16$ ;  $SE = 0.83$ ) and interpersonal action ( $M = 1.16$ ,  $SE = 0.82$ ) were not significantly different ( $p = .79$ ). In contrast, for perceptions of potential allies with a different race/ethnicity than the participant, past interpersonal action ( $M = 0.65$ ,  $SE = 0.93$ ) was rated as more indicative of supportive than self-educating about discrimination ( $M = 0.48$ ,  $SE = 0.92$ ;  $p < .001$ ). All other differences between groups were significant ( $ps < .049$ ).



**Table 22**

Mixed Model Predicting Anticipated Support from Same or Different Race/Ethnicity and Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.31*	0.03	0.25, 0.36
Same race/ethnicity	0.71*	0.03	0.64, 0.77
Education	0.18*	0.03	0.13, 0.23
Interpersonal	0.36*	0.03	0.30, 0.42
Political action	0.51*	0.03	0.45, 0.57
Same race/ethnicity:Education	-0.04	0.03	-0.10, 0.03
Same race/ethnicity:Interpersonal	-0.20*	0.03	-0.26, -0.14
Same race/ethnicity:Political action	-0.28*	0.03	-0.34, -0.22
$\sigma^2$	0.33		
ICC	0.59		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.093		

*Note.* Potential allies of different race/ethnicities (relative to the participant) and no information about past behavior are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

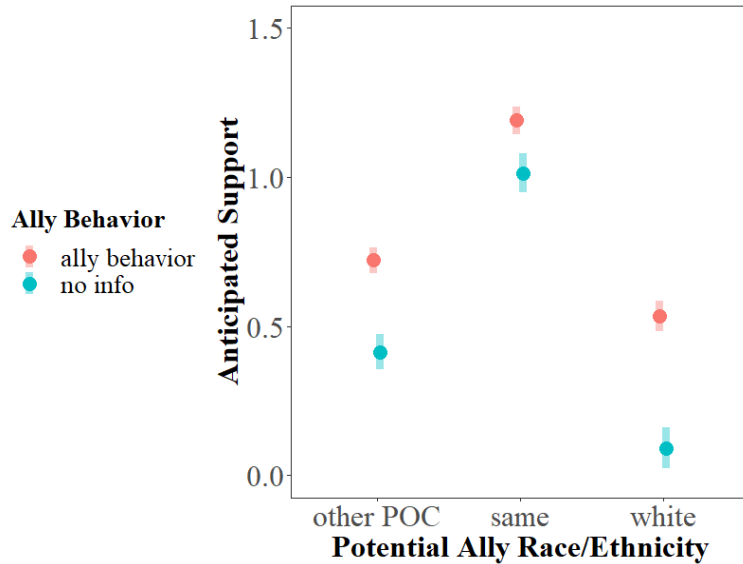
Finally, we tested whether an interaction between the variable of potential ally race/ethnicity (coded as same racial/ethnicity as participant, other potential ally of color, or White) and allyship behavior (coded as allyship behavior or not) would predict perceptions of support. The interaction was significant ( $\chi^2(2) = 64.90, p < .001$ ; See Table 23 and Figure 6). Participants anticipated the most support from potential allies of shared race/ethnicity with past allyship behavior ( $M = 1.20, SE = 0.82$ ), followed by potential allies of shared race/ethnicity with no behavioral information ( $M = 1.00, SE = 0.87$ ), followed by other people of color with allyship behavior ( $M = 0.72, SE = 0.89$ ), followed by White people with allyship behavior ( $M = 0.53, SE = 0.97$ ), followed by other people of color with no behavioral information ( $M = 0.44, SE = 0.94$ ), and White people with no behavioral information ( $M = 0.12, SE = 0.98$ ). All group differences were significantly different ( $ps < .001$ ). However, there were greater differences between

behavior and no behavior ratings for other potential allies of color and White potential allies as compared to differences in behavior ratings for potential allies of shared racial/ethnic identity (other POC-same race/ethnicity: difference in slope estimate = 0.13,  $SE = 0.03$ ,  $z = 4.62$ ,  $p < .001$ ; White-same race/ethnicity: difference in slope estimate = 0.26,  $SE = 0.03$ ,  $z = 8.06$ ,  $p < .001$ ). Although participants generally rate potential allies of shared racial/ethnic identities as more supportive than others, these findings imply that past allyship behavior may be a more important cue of perceived support for potential allies of different racial or ethnic groups as compared to potential allies of a shared race/ethnicity.

**Table 23**  
Mixed Model Predicting Anticipated Support from Potential Ally  
Race/Ethnicity and Dichotomous Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95 % CI</i>
(Intercept)	0.72*	0.02	0.68, 0.77
Same race/ethnicity	0.47*	0.02	0.42, 0.52
White	-0.19*	0.02	-0.22, -0.15
No information	-0.31*	0.03	-0.36, -0.25
Same race/ethnicity:No information	0.13*	0.03	0.08, 0.19
White:No information	-0.13*	0.03	-0.19, -0.08
$\sigma^2$	0.34		
ICC	0.53		
$N_{\text{participant}}$	931		
Observations	25858		
$R^2$	0.087		

*Note.* Other potential allies of color and past behavior are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 6**

Anticipated Support Predicted from Potential Ally Race/Ethnicity and Dichotomous Past Allyship Behavior

*Note.* Anticipated Support axis (-2 = *Extremely unlikely* to 2 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals.

### 3.7 Allyship Behavior Block Order

We also tested whether participants gave different ratings based on the allyship behavior block order, finding that participants rated potential allies as more supportive in the second block of questions as compared to the first ( $\chi^2(1) = 54.82, b = 0.15, p < .001$ ). Due to this difference, we entered block order (dummy coded as 1<sup>st</sup> as 0 and 2<sup>nd</sup> as 1) as a covariate in all models to examine any differences in likelihood ratio test results. This additional covariate entered in the model resulted in no changes to the results.

## **4. Study 1 Discussion**

In study 1 we found that Black, Hispanic, and Asian individuals tend to anticipate higher support from potential allies of their shared racial or ethnic group, showing support for the notion that shared stigmatized identities increases anticipated support. After ones' ingroup, people anticipated the most support from Black potential allies followed by Hispanic potential allies and then by Asian and White potential allies. Participants also anticipated more support from women than men, and the magnitude of this perception varied by potential ally race/ethnicity. We also found that past behavior was an important cue, especially for allies of different race/ethnicities relative to potential allies of the same race/ethnicity, providing evidence that allyship behavior matters more for those of unshared identities.

## 5. Study 2

In Study 1, it was not possible to completely distinguish the extent to which participants' use of race/ethnicity and gender-specific stereotypes or shared stigmatized identities with potential allies influenced their perceptions of allyship. For instance, did Black, Asian, and Hispanic participants simply hold varying stereotypes about which racial/ethnic groups are perceived as most supportive regardless of the type of discrimination experienced or did shared stigmatization of racial/ethnic group play a role in higher support perceptions due to the offensive comment being about race/ethnicity? Due to the challenge of separating these possibilities, we further investigated whether similar trends would hold if participants were encountering a different type of bias. If trends in perceptions for potential allies remained stable when compared to findings from Study 1, this would indicate that group-specific stereotypes are driving perceptions of allyship, whereas if experiencing a different type of bias would change the relative importance of a shared stigmatized identity (e.g., decrease the relative importance of shared race/ethnicity and increase the importance of shared gender), this would indicate that perceptions of shared stigmatization are driving perceptions of allyship. Therefore, in Study 2, we investigated who women anticipated support from when faced with sexism. Specifically, we tested whether perceived support varied between Black, Hispanic, Asian, and White women and whether group specific stereotypes based on race/ethnicity and gender of potential allies influenced who would be perceived as more supportive allies. We also investigated whether shared (and potentially stigmatized) identities of race/ethnicity and past allyship behavior predicted differing levels of support. We were additionally interested in whether differences between perceptions of female as compared to male allies varied based on women's personal level of experiences with sexism.

Based on the Rejection-Identification Model (Branscombe et al., 1999), we specifically hypothesized that female participants would anticipate more support for women than men on average and that participants higher in past experiences with sexism would have a greater gap in anticipated support for female versus male allies as compared to participants lower in past experiences with sexism. We also predicted that participants would again view political action as the most supportive past behavior followed by interpersonal action and education about discrimination. Based on the Study 1 significant interaction of shared racial identities and allyship behavior, we additionally hypothesized that differences between ratings of for allies with past allyship behavior and no past allyship behavior would be smaller for female potential allies relative to male potential allies.

## 6. Study 2 Method

### 6.1 Participants

Participants were recruited to complete the study on the Project Implicit research website (<https://implicit.harvard.edu>). Participants were eligible if they were a U.S. resident or citizen that was 18 years or older and identified as a woman and as either monoracial/ethnic Black, Hispanic, Asian, or White. To be consistent with Study 1, we again aimed to recruit approximately 300 participants from each eligible racial or ethnic group (Black, Hispanic, Asian, and White). We collected 1758 participants and excluded 454 participants for exiting the study before completing the primary measures, eight participants for declining to answer all of the primary measures, and 25 participants for missing data due to technological error. In Study 2, we additionally excluded participants who did not pass the manipulation check question ( $n = 64$ ). The final sample ( $N = 1207$ ) included 299 participants identifying as Black or African American, 302 participants identifying as Hispanic, Latino or Spanish Origin, and 297 participants identifying as Asian, and 309 participants identifying as White. All participants identified as women, and participant mean age was 33.6 years ( $SD = 14.8$ ). Ideologically, 50.1% identified as liberal, 30.4% identified as moderate, 16.1% identified as conservative, and 3.3% did not report their political ideology.

### 6.2 Procedure

The procedure for Study 2 was similar to that of Study 1. Participants were again randomly assigned to complete two of four potential blocks of questions assessing their perceived likelihood that an imagined acquaintance would support them if someone were to make an offensive comment to them, but rather than the offensive comment being about their

race or ethnicity, the offensive comment was about their gender. The four potential blocks included vignettes mentioning that their imagined acquaintance – the potential ally – had taken part in one of various types of *anti-sexist* behavior including education, interpersonal action, or political action. Alternatively, they were told about the potential ally with no mention of past allyship behavior. The potential ally vignettes had the same number of blocks and questions as in Study 1. After completing two perceptions of allyship blocks, participants completed a manipulation check question, the Gender-Career IAT, the Modified Schedule of Sexist Events, and one item assessing subjective socio-economic status. Participants were then debriefed.

## **6.3 Materials**

### **6.3.1 Potential Ally Vignettes**

Just as in Study 1, in each of the four possible question blocks participants were asked to imagine an acquaintance who is either described as Black, Hispanic, Asian, or White and as either as a woman or a man for eight possible identity combinations presented within subjects (e.g., “Imagine you had an acquaintance who was an Asian woman”). This was entirely consistent with Study 1.

The blocks including mention of past allyship behavior in Study 2 referenced anti-sexist allyship behaviors in place of the anti-racist allyship behaviors mentioned in Study 1. For instance, in the education block participants were told that their imagined acquaintance educated him or herself about discrimination that women experience either currently in the United States or throughout American history (e.g., “She informs herself about how women have been discriminated against throughout the course of American history”) In the interpersonal action block, participants were told that their acquaintance participants in discussions about how to be more inclusive to women at work or that the acquaintance confronts offensive comments in person an online that they hear



about women (e.g., “He confronts offensive comments about women he hears in person or sees online”). In the political action block, participants were told that their acquaintance either attends political protests advocating for gender equality for women or donates their time and money to organizations to support women (e.g., “She donates her time and money to organizations that support women in her community.”). As in Study 1, all participants were randomly presented with two of the four potential blocks of vignettes (education, interpersonal action, political action, or no behavior). All vignettes within each block were presented in random order.

### **6.3.2 Key Dependent Measure**

#### **Perceived Support**

Below each potential ally vignette, participants were asked two questions to assess the extent to which they anticipated that each potential ally would support them if they were to experience gender discrimination. To assess perceptions that potential allies would respond emotionally on the participant’s behalf we asked: “What is the likelihood that [she/he] would become angry on your behalf if someone made an offensive comment to you based on your gender?” Representing a slight change from Study 1, the question was measured on a 7-point scale of -3 (*Extremely unlikely*) to 3 (*Extremely likely*). To assess perceptions that the potential ally would take action to support the participant we asked: “What is the likelihood that [she/he] would take action to support you if someone made an offensive comment to you based on your gender?” The question was also measured on a 7-point scale of -3 (*Extremely unlikely*) to 3 (*Extremely likely*).

Responses to these two questions were again averaged together to form the perceived support outcome variable ( $\omega = .92$ ).

### **6.3.2 Additional Measures**

Among these additional measures, the manipulation check question and the Modified Schedule of Sexist Events measures are included in the results, while the other measures were included as exploratory and are not included in the current report.

#### **Manipulation Check**

To assess whether participants were paying attention to the study, after completing the perceptions of allyship blocks, we included a manipulation check question: “Which of the following people were you not asked to make perceptions about?” with answers being: “Hispanic woman,” “American Indian man” (correct), “Asian woman,” and “White man.”

#### **Gender-Career IAT**

As an exploratory measure, participants completed an Implicit Association Test assessing implicit associations for women and men with family and career words (Nosek et al., 2007). Participants were asked to sort male and female names (e.g., Ben, Paul, Anna, Julia) and family or career words (e.g., career, office, family, home) to the left or right of the screen. Reaction times for sorting were compared for trials in which “Family” was paired with “Male” and “Career” was paired with “Female” relative to trials in which “Family” was paired with “Female” and “Male” was paired with “Career” to assess implicit associations of men and women with family or careers. The IAT had the same block and trial structure as the IAT in Study 1.

#### **Modified Schedule of Sexist Events**

Participants completed a 13-item scale to assess severity of experiences with discrimination based on gender (example item: “As a woman how often...Have you been treated unfairly by your employers, bosses and supervisors?”) (Klonoff & Landrine, 1995; modified by Bowleg et

al., 2008). The scale was highly reliable ( $\omega = .88$ ) and reliability was consistent across participant racial/ethnic groups ( $\omega = .88-90$ ).

**MacArthur Scale of Subjective Social Status (Adler et al., 2000)**

The one item scale was again included to assess subjective social status in the U.S. as an exploratory measure.

## 7. Study 2 Results

As with Study 1, we conducted linear mixed models fit with maximum likelihood estimation.

Analyses were preregistered at

[https://osf.io/8mnkv/?view\\_only=acaa67a4e3a94f259f9f68248d5a52a1](https://osf.io/8mnkv/?view_only=acaa67a4e3a94f259f9f68248d5a52a1). For all models reported

we included a random intercept of participant. The intraclass correlation for a model with participants as a random intercept and no predictors included was .399, indicating that 39.9% of the variance in the outcome of perceptions of support was between participants and that 60.1% of the variance in perceptions of support was within participants' responses. We again included within subjects manipulated predictors as random slopes for the models presented below. Just as in Study 1, we adjusted the random structure of the models only to ensure model convergence, and we note which models needed random effect structure adjustments throughout. Raw means and standard deviations are reported. Analyses were again conducted in R using the same packages as for Study 1.

### 7.1 Perceiver Race/Ethnicity

We first tested whether participant racial or ethnic identity predicted differences in average levels of perceived support from allies. With a model including participant race/ethnicity as a predictor ( $\chi^2(3) = 16.57, p < .001$ ; See Table 24), we found that Asian women ( $M = 1.35, SE = 0.05$ ) and White women ( $M = 1.34, SE = 0.05$ ) anticipated the highest average support followed by Hispanic women ( $M = 1.22, SE = 0.05$ ) and Black women ( $M = 1.08, SE = 0.05$ ). Asian women and White women both had significantly higher average ratings than Black women (Asian-Black:  $M_D = 0.27, SE = 0.08, z = 3.58, p = .002$ ; White-Black:  $M_D = 0.26, SE = 0.08, z = 3.42, p = .003$ ). All other group comparisons were not significant ( $ps > .27$ ).

**Table 24**

Mixed Model Predicting Anticipated Support from Participant Race/Ethnicity

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	1.35*	0.05	1.24, 1.46
Black	-0.27*	0.08	-0.42, -0.12
Hispanic	-0.13	0.08	-0.28, 0.02
White	-0.01	0.08	-0.16, 0.13
$\sigma^2$	1.25		
ICC	0.40		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.006		

*Note.* Asian participants are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

## 7.2 Group-Specific Stereotypes

We then tested whether the potential ally manipulations of race/ethnicity and gender influenced the participants perceptions of support. We first entered potential ally gender (woman or man) into the model. We found that participants anticipated significantly more support from female potential allies ( $M = 1.54$ ,  $SE = 0.03$ ) as compared to male potential allies ( $M = 0.95$ ,  $SE = 0.03$ ;  $\chi^2(1) = 643.68$ ,  $p < .001$ ; See Table 25).

**Table 25**

Mixed Model Predicting Anticipated Support from Potential Ally Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.95*	0.03	0.89, 1.01
woman	0.59*	0.02	0.55, 0.63
$\sigma^2$	1.08		
ICC	0.46		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.041		

*Note.* Male potential allies are the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

Next, we tested whether the potential ally manipulations of gender and potential ally race/ethnicity independently influenced perceived support by entering both predictors in the model. Potential ally gender remained significant ( $\chi^2(1) = 642.85, p < .001$ ), and potential ally race/ethnicity also significantly predicted perceived support ( $\chi^2(1) = 527.27, p < .001$ ; See Table 26). Follow up tests for potential ally race/ethnicity revealed that Black potential allies ( $M = 1.69, SE = 0.03$ ) were perceived as most supportive followed by Hispanic potential allies ( $M = 1.31, SE = 0.03$ ), and then by White potential allies ( $M = 1.01, SE = 0.03$ ) and Asian potential allies ( $M = 0.97, SE = 0.04$ ). Ratings for all groups were significantly different ( $ps < .001$ ) except between White and Asian potential allies ( $p = .26$ ).

**Table 26**  
Mixed Model Predicting Anticipated Support from Potential Ally Gender and Race/Ethnicity, No Interaction

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.67*	0.04	0.60, 0.75
woman	0.59*	0.02	0.55, 0.63
Black	0.72*	0.03	0.66, 0.78
Hispanic	0.34*	0.02	0.29, 0.38
White	0.04	0.02	-0.00, 0.09
$\sigma^2$	0.77		
ICC	0.60		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.081		

*Note.* Male and Asian potential allies are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

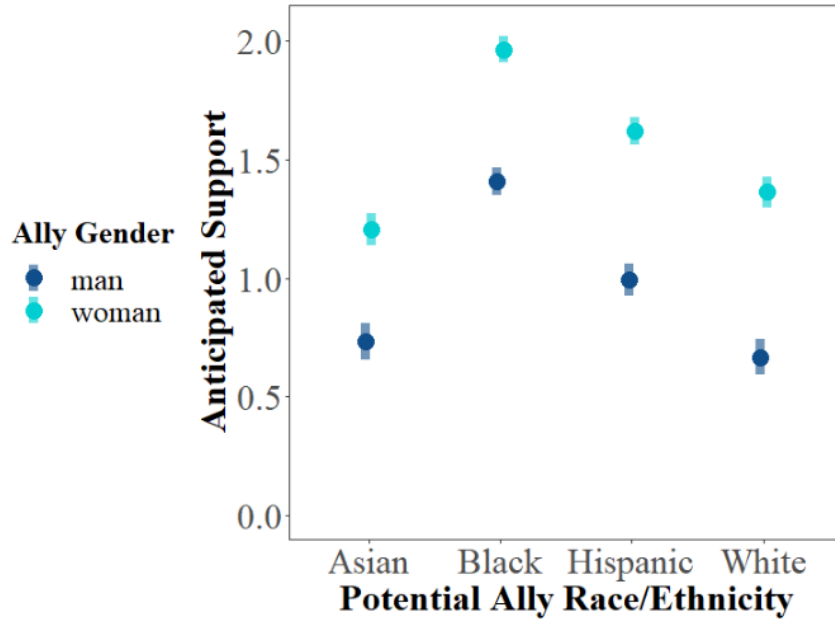
Finally, we tested whether the interaction between potential ally gender and race/ethnicity predicted perceived support. We found a significant interaction of potential ally gender and race/ethnicity ( $\chi^2(3) = 73.44, p < .001$ ; See Table 27 and Figure 7). Follow up tests revealed that on average participants anticipated the highest support from Black women ( $M = 1.97, SE =$

0.03), followed by Hispanic women ( $M = 1.62, SE = 0.03$ ), Black men ( $M = 1.41, SE = 0.03$ ), White women ( $M = 1.36, SE = 0.03$ ), Asian women ( $M = 1.21, SE = 0.03$ ), Hispanic men ( $M = 0.99, SE = 0.03$ ), Asian men ( $M = 0.73, SE = 0.04$ ), and White men ( $M = 0.67, SE = 0.04$ ). All groups had significantly different ratings ( $ps < .038$ ) except differences between Black men and White women ( $p = .17$ ).

**Table 27**  
Mixed Model Predicting Anticipated Support from Potential Ally Gender and Race/Ethnicity, with Interaction

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.73*	0.04	0.65, 0.81
woman	0.48*	0.03	0.42, 0.53
Black	0.68*	0.03	0.61, 0.74
Hispanic	0.26*	0.03	0.21, 0.31
White	-0.07*	0.03	-0.12, -0.01
woman:Black	0.08*	0.03	0.03, 0.13
woman:Hispanic	0.15*	0.03	0.10, 0.20
woman:White	0.22*	0.03	0.17, 0.28
$\sigma^2$	0.77		
ICC	0.60		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.081		

*Note.* Male and Asian potential allies are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 7**

Anticipated Support Predicted from Potential Ally Gender and Potential Ally Race/Ethnicity

*Note.* Anticipated Support axis (-3 = *Extremely unlikely* to 3 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals.

### 7.3 Shared Stigmatization

We then tested whether the participant and the potential ally having the same race/ethnicity or different race/ethnicities would predict anticipated support (coded as same or different) and potential ally gender would independently predict anticipated support. With potential ally gender and same or different race/ethnicity predictors in the model we found a significant effect of shared race/ethnicity ( $\chi^2(1) = 138.60, p < .001$ ; See Table 28), with potential ally gender remaining significant. On average, participants anticipated higher support from potential allies of shared racial/ethnic identities ( $M = 1.48, SE = 0.03$ ) as compared to potential allies of different racial/ethnic groups ( $M = 1.17, SE = 0.03$ ).



**Table 28**

Mixed Model Predicting Anticipated Support from Potential Ally Gender and Same or Different Race/Ethnicity, No Interaction

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.87*	0.03	0.81, 0.94
woman	0.59*	0.02	0.55, 0.63
same race/ethnicity	0.31*	0.03	0.26, 0.36
$\sigma^2$	0.94		
ICC	0.53		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.050		

*Note.* Male potential allies and potential allies of different race/ethnicities relative to the participants are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

Next, we tested whether there was an interaction between potential ally gender and shared racial/ethnic identity. We found a significant interaction ( $\chi^2(1) = 19.38, p < .001$ ; See Table 29). Follow up tests revealed that participants anticipated the highest support from women of shared racial/ethnic identities ( $M = 1.82, SE = 1.81$ ) followed by women of other racial/ethnic groups ( $M = 1.45, SE = 0.03$ ) followed by men of shared racial/ethnic identities ( $M = 1.14, SE = 0.03$ ), followed by men of other racial/ethnic groups ( $M = 0.89, SE = 0.03$ ). For ratings of female potential allies, differences between shared and unshared racial/ethnic identities were larger as compared to differences in ratings between male potential allies of shared or unshared racial/ethnic identities (slope difference estimate = 0.11,  $SE = 0.02, z = 4.40, p < .001$ ).

**Table 29**

Mixed Model Predicting Anticipated Support from Potential Ally Gender and Same or Different Race/Ethnicity, with Interaction

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.89*	0.03	0.82, 0.95
woman	0.56*	0.02	0.52, 0.60
same race/ethnicity	0.26*	0.03	0.20, 0.31
woman:same race/ethnicity	0.11*	0.02	0.06, 0.16
$\sigma^2$	0.94		
ICC	0.53		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.050		

*Note.* Male potential allies and potential allies of different race/ethnicities relative to the participants are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

We then tested whether the effect of shared race/ethnic identity between participant and potential ally varied based on participant race/ethnicity. We found a significant interaction ( $\chi^2(3) = 450.78$ ,  $p < .001$ ; See Table 30). For Black and Hispanic participants, allies of shared racial/ethnic identities were viewed as more supportive than allies of other identities (Black participants:  $M_D = 1.13$ ,  $SE = 0.04$ ,  $z = 26.34$ ,  $p < .001$ ; Hispanic participants:  $M_D = 0.32$ ,  $SE = 0.04$ ,  $z = -7.44$ ,  $p < .001$ ). However, for Asian participants, Asian potential allies were perceived as less supportive than other potential allies ( $M_D = -0.13$ ,  $SE = 0.04$ ,  $z = -2.97$ ,  $p = 0.033$ ). For White participants, there were no differences in average perceptions between White potential allies and other potential allies ( $p = 1.00$ ).

**Table 30**

Mixed Model Predicting Anticipated Support from Participant Race/Ethnicity and Same or Different Race/Ethnicity

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	1.38*	0.06	1.27, 1.49
Black participants	-0.59*	0.08	-0.75, -0.43
Hispanic participants	-0.24*	0.08	-0.40, -0.09
White participants	-0.03	0.08	-0.19, 0.13
same race/ethnicity	-0.13*	0.04	-0.21, -0.04
Black participants:same race/ethnicity	1.25*	0.06	1.13, 1.37
Hispanic participants:same race/ethnicity	0.44*	0.06	0.33, 0.56
White participants:same race/ethnicity	0.06	0.06	-0.05, 0.18
$\sigma^2$	1.12		
ICC	0.44		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.037		

*Note.* Asian participants and potential allies of different race/ethnicities relative to the participants are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

We then tested whether perceptions of support based on potential ally race/ethnicity would depend on participant race/ethnicity. We included predictors of participant race/ethnicity, potential ally race/ethnicity, and their interaction. The interaction was significant ( $\chi^2(9) = 282.22$ ,  $p < .001$ ; See Table 31 and Figure 8). For Black participants, Black potential allies were perceived as most supportive ( $M = 1.92$ ,  $SE = 0.05$ ) followed by Hispanic potential allies ( $M = 1.12$ ,  $SE = 0.06$ ), and then by White potential allies ( $M = 0.69$ ,  $SE = 0.07$ ) and Asian potential allies ( $M = 0.57$ ,  $SE = 0.07$ ). For Black participants, all differences were significant ( $ps < .001$ ) except between White and Asian potential allies ( $p = 0.54$ ). For Hispanic participants, Black potential allies were perceived as most supportive ( $M = 1.60$ ,  $SE = 0.05$ ) followed by Hispanic potential allies ( $M = 1.46$ ,  $SE = 0.06$ ), then by Asian potential allies ( $M = 0.93$ ,  $SE = 0.0$ ) and White potential allies ( $M = 0.90$ ,  $SE = 0.07$ ). All differences were significant ( $ps < .012$ ) except

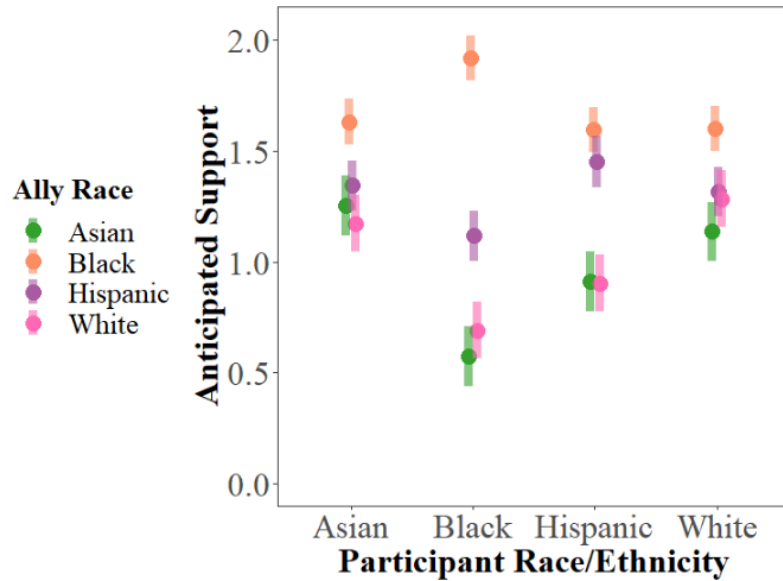
between Asian and White potential allies ( $p = 1.00$ ). For Asian participants, Black potential allies ( $M = 1.63, SE = 0.05$ ) were perceived as most supportive followed by Hispanic potential allies ( $M = 1.34, SE = 0.06$ ), Asian potential allies ( $M = 1.25, SE = 0.07$ ), and White potential allies ( $M = 1.17, SE = 0.07$ ). For Asian participants, all differences were significant ( $ps < .021$ ) except between Hispanic and Asian potential allies ( $p = .85$ ) and between Asian and White potential allies ( $p = 1.00$ ). For White participants, Black potential allies ( $M = 1.60, SE = 0.05$ ) were perceived as most supportive followed by Hispanic potential allies ( $M = 1.32, SE = 0.06$ ), White potential allies ( $M = 1.29, SE = 0.06$ ) and Asian potential allies ( $M = 1.14, SE = 0.07$ ). For White participants, all differences were significant ( $ps < .002$ ) except between Hispanic and White potential allies ( $p = 1.00$ ) and between White and Asian potential allies ( $p = .080$ ).

**Table 31**

Mixed Model Predicting Anticipated Support from Participant and Potential Ally  
Race/Ethnicity

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	1.25*	0.07	1.12, 1.39
Black participants	-0.68*	0.10	-0.87, -0.49
Hispanic participants	-0.34*	0.10	-0.53, -0.15
White participants	-0.12	0.10	-0.31, 0.07
Black potential allies	0.38*	0.06	0.27, 0.49
Hispanic potential allies	0.09*	0.04	0.01, 0.18
White potential allies	-0.08	0.04	-0.18, 0.02
Black participants:Black potential allies	0.97*	0.08	0.81, 1.12
Hispanic participants:Black potential allies	0.31*	0.08	0.15, 0.46
White participants:Black potential allies	0.09	0.08	-0.07, 0.24
Black participants:Hispanic potential allies	0.45*	0.06	0.33, 0.57
Hispanic participants:Hispanic potential allies	0.45*	0.06	0.33, 0.57
White participants:Hispanic potential allies	0.09	0.06	-0.03, 0.21
Black participants:White potential allies	0.20*	0.07	0.06, 0.33
Hispanic participants:White potential allies	0.07	0.07	-0.07, 0.21
White participants:White potential allies	0.23*	0.07	0.09, 0.36
$\sigma^2$	0.98		
ICC	0.50		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.057		

*Note.* Asian participants and Asian potential allies are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 8**

Anticipated Support Predicted from Participant Race/Ethnicity and Potential Ally Race/Ethnicity  
*Note.* Anticipated Support axis (-3 = *Extremely unlikely* to 3 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals.

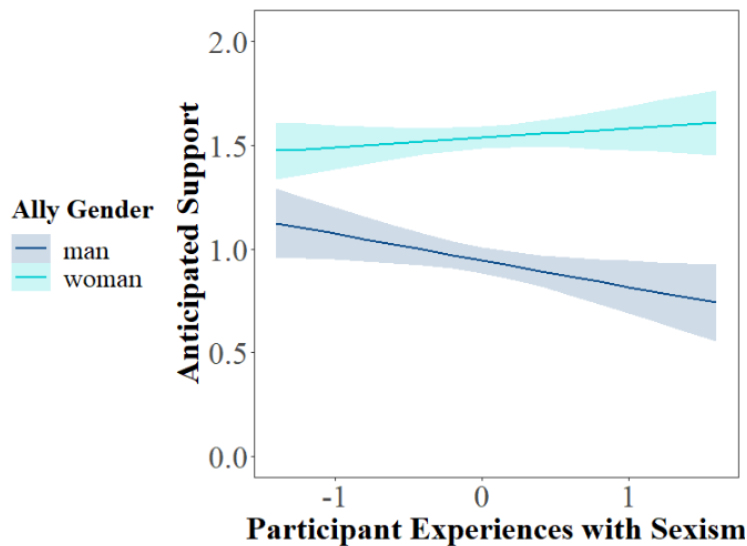
We then tested whether level of past experiences with sexism and potential ally gender interacted to predict anticipated support. We included the predictors of potential ally gender, mean-centered experiences with sexism, and their interaction in the model. We found a significant interaction ( $\chi^2(1) = 23.17, p < .001$ ; See Table 32 and Figure 9). The model predicted that for participants at mean levels of experiences with sexism, female potential allies were rated 0.59 higher than male potential allies ( $SE = 0.02, t(1104.68) = 28.40, p < 001$ ). For participants one standard deviation higher than the mean of experiences with sexism at 0.58, female potential allies were rated 0.69 higher than male potential allies ( $SE = 0.03, t(1110.52) = 23.50, p < 001$ ). In contrast, for participants one standard deviation lower than the mean of experiences with sexism at -0.58, female potential allies were rated 0.49 higher than male potential allies ( $SE = 0.03, t(1104.56) = 16.64, p < .001$ ). In other words, for participants with higher experiences with sexism as

compared to lower, there were greater differences between ratings for female and male potential allies.

**Table 32**  
Mixed Model Predicting Anticipated Support from Participant Past Experiences with Sexism and Potential Ally Gender

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.95*	0.03	0.88, 1.01
female potential ally	0.59*	0.02	0.55, 0.63
SSE	-0.13*	0.06	-0.24, -0.02
female potential ally:SSE	0.17*	0.04	0.10, 0.24
$\sigma^2$	1.09		
ICC	0.46		
$N_{\text{participant}}$	1121		
Observations	30936		
$R^2$	0.043		

*Note.* Male potential allies are the reference group (dummy coded as 0). The Modified Schedule of Sexist Events (SSE) measure is mean-centered. *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.



**Figure 9**  
Anticipated Support Predicted from Participant Experiences with Sexism and Potential Ally Gender

*Note.* Anticipated Support axis (-3 = *Extremely unlikely* to 3 = *Extremely unlikely*) is truncated to show differences. Lines represent means levels with 95% confidence intervals. Participant experiences with sexism is mean centered at 0.

## 7.4 Allyship Behavior

We then tested whether past allyship behavior of the potential ally was a significant predictor of anticipated support. As hypothesized, participants anticipated the most support from potential allies who had taken part in political action, followed by interpersonal action, education, and no mention of past behavior ( $\chi^2(3) = 348.65, p < .001$ ; See Table 33 for regression coefficients and Table 34 for model estimated means). All differences between group ratings were significant ( $p < .001$ ).

**Table 33**  
Mixed Model Predicting Anticipated Support from Potential Ally Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.76*	0.04	0.68, 0.83
Education	0.34*	0.04	0.26, 0.41
Interpersonal	0.64*	0.04	0.56, 0.72
Political Action	0.81*	0.04	0.73, 0.89
$\sigma^2$	1.06		
ICC	0.47		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.038		

*Note.* No information about past behavior is the reference group (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Table 34**  
Model Predicted Means of Perceived Support from Potential Ally Past Behavior

Past Behavior	<i>N</i>	<i>M</i>	<i>SE</i>
No information	5057	0.76	0.04
Education	9474	1.09	0.04
Interpersonal	9291	1.39	0.04
Political Action	9427	1.57	0.04



## 7.5 Shared Stigmatization and Allyship Behavior

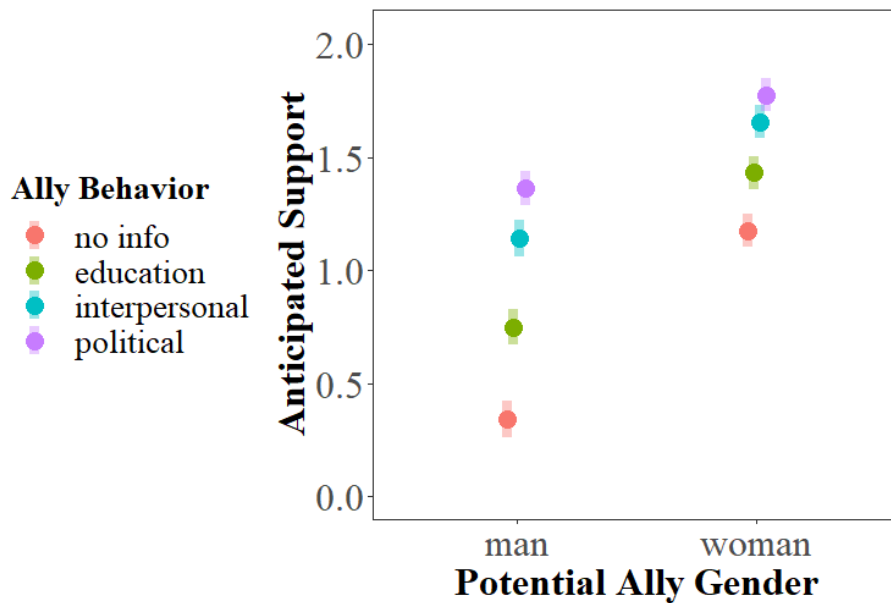
Lastly, we tested whether the predictors of potential ally gender and allyship behavior would interact to predict perceived support. We hypothesized that differences among anticipated support based on past behavior would be greater for potential ally men as compared to potential ally women. We found a significant interaction ( $\chi^2(3) = 161.96, p < .001$ ; See Table 35 and Figure 10). For ratings of both female and male potential allies, participants anticipated the highest support from those who had taken part in political action ( $M_F = 1.77, SE = 0.04; M_M = 1.36, SE = 0.04$ ) followed by interpersonal action ( $M_F = 1.67, SE = 0.04; M_M = 1.14, SE = 0.04$ ), education ( $M_F = 1.43, SE = 0.04; M_M = 0.75, SE = 0.04$ ), and no past behavior ( $M_F = 1.18, SE = 0.04; M_M = 0.34, SE = 0.04$ ). However, there were greater differences between past allyship behavior ratings for male potential allies as compared to female potential allies (slope difference estimate =  $-1.43, SE = 0.11, z = -12.62, p < .001$ ), indicating that past behavior was a larger cue of anticipated support for male potential allies than for female potential allies.

**Table 35**

Mixed Model Predicting Anticipated Support from Potential Ally Gender and Past Behavior

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>95% CI</i>
(Intercept)	0.34*	0.04	0.26, 0.42
woman	0.83*	0.03	0.77, 0.90
Education	0.41*	0.04	0.33, 0.49
Interpersonal	0.80*	0.05	0.71, 0.89
Political Action	1.02*	0.05	0.93, 1.11
woman:Education	-0.15*	0.04	-0.22, -0.08
woman:Interpersonal	-0.31*	0.04	-0.39, -0.24
woman:Political	-0.42*	0.04	-0.49, -0.35
$\sigma^2$	0.87		
ICC	0.55		
$N_{\text{participant}}$	1207		
Observations	33249		
$R^2$	0.081		

*Note.* Male potential allies and no information are the reference groups (dummy coded as 0). *b* values are unstandardized regression coefficients. Asterisks represent significant effects based on 95% confidence intervals.

**Figure 10**

Anticipated Support Predicted from Potential Ally Gender and Past Allyship Behavior

*Note.* Anticipated Support axis (-3 = *Extremely unlikely* to 3 = *Extremely unlikely*) is truncated to show differences. Points represent means with 95% confidence intervals.

## 7.6 Allyship Behavior Block Order

We again tested whether participants gave different ratings based on the allyship behavior block order, and as in Study 1, we found that participants rated potential allies as more supportive in the second block of questions as compared to the first ( $\chi^2(1) = 84.53, b = 0.26, p < .001$ ). We again entered block order (dummy coded as 1<sup>st</sup> as 0 and 2<sup>nd</sup> as 1) in models as a covariate to examine any differences. The additional covariate entered in the models resulted in no changes to results.

## 8. Discussion

In Study 2 we again found that perception of allyship, or who is viewed as supportive when women experience sexism, varied by perceiver characteristics of race/ethnicity, potential ally gender race/ethnicity, shared stigmatized identities, and past behavior. Asian and White participants anticipated higher support on average than Hispanic participants. As predicted, female potential allies were perceived as more supportive than male potential allies. We also found that potential ally race/ethnicity as well as the interaction of race/ethnicity and gender predicted levels of support, with Black women and Hispanic women being perceived as most supportive and Asian men and White men being perceived as least supportive. We additionally found that the amount of personal experiences with sexism moderated anticipated support for female and male potential allies in that participants high in experiences with sexism had a bigger gap between support for women and men as compared to participants with less direct experiences with sexism. In regard to past behavior, female participants perceived potential allies who took part in political action to be most supportive followed by interpersonal, education, and no information about past behavior. Past behavior and potential ally gender interacted in that past allyship behaviors were more meaningful cue of support relative to no allyship behavior for male allies as compared to the female allies.

## 9. General Discussion

In both studies, we sought to investigate who individuals perceived as allies when they encounter discrimination. We found that for experiencing racism, perceptions of support varied based on participant race/ethnicity, such that Hispanic participants anticipated higher support than Black participants and Asian participants perceptions were not significantly different than either of the other groups. For experiencing sexism, Asian and White women perceived higher support than Black women, with perceptions of Hispanic women with no significant differences between other groups. We found no evidence that average levels of support varied between men and women in Study 1. Black potential allies were generally perceived as most supportive followed by Hispanic, Asian, and White potential allies. This pattern held for both studies, except that for experiences with sexism (Study 2) there were no differences between perceptions of Asian and White potential allies. In both studies, women were perceived as more supportive than men as potential allies, although the gender mattered more experiences of sexism in Study 2. Allyship behavior was a meaningful cue of anticipated support in both studies with participants consistently viewing political action, interpersonal behavior, and education as more supportive than no past behavior. The influence of past behavior was moderated by whether the potential ally had shared stigmatization based on the identity targeted by the offensive comment (race/ethnicity: Study 1; gender: Study 2). Past behavior mattered less for allies with shared stigmatization. Lastly, Study 2 also provided evidence that women with higher experiences of sexism had greater differences in perceived support from female versus male potential allies.

In both studies, we found average differences between anticipated support for some racial/ethnic groups studied. Black participants perceiving lower support for racial discrimination in Study 1

as compared to Hispanic participants. For support after sexism, Black women perceived lower average support as compared to Asian and White women. Upon investigating differences by potential ally racial identity for Black participants, we find that the low average support anticipated by Black participants relative to others is contrasted with anticipating high support from other Black people. However, all participant groups in both studies anticipated high average support from Black potential allies. These findings suggest that Black individuals face higher expectations of being allies for other groups relative to the support they anticipate receiving from other groups. This trend may be especially salient for Black women, due to being perceived as the most supportive across both studies.

Both studies additionally found that both potential ally race/ethnicity and gender were used as cues when individuals perceived who would be an ally, but the amount by which participants used these cues varied by the identity (race/ethnicity or gender) that was being targeted in the study scenario. Women were seen as somewhat more supportive as allies for racial discrimination than men in Study 1 while women were viewed as even more supportive than men for gender discrimination in Study 2. We can compare the unstandardized beta coefficients and  $R^2$  values to understand the relative importance of potential ally gender and race/ethnicity in each study. In Study 1, with a model including predictors of potential ally race/ethnicity and gender, Black individuals were perceived as 0.61 scale units more supportive than White individuals (the largest group difference by race/ethnicity,  $R^2 = .054$ ), while women were perceived as only 0.11 scale units more supportive than men on the 5-point scale ( $R^2 = .004$ ), indicating that the largest difference based on race/ethnicity was more than 5 times the gender difference. In the same analysis for Study 2 on a 7-point scale, Black individuals were rated as .72 scale units more supportive than Asian individuals (the largest group difference by

race/ethnicity,  $R^2 = .032$ ), while women were perceived as .59 scale units more supportive than men ( $R^2 = .043$ ). These comparisons highlight that although the potential ally race/ethnicity and gender were both significant predictors in both studies, the relative importance of gender as compared to race/ethnicity increased for experiences of sexism as compared to racism.

These findings suggesting that the relative importance of ally identities vary by type of discrimination supports the arguments of the Stigma-Based Solidarity model (Craig & Richeson, 2016), that the dimension of stigmatization (whether that be race/ethnicity or gender) matters for coalitional attitudes. Although shared racial/ethnic identity mattered for experiences of racism in Study 1, Black participants were the only group that anticipated the highest support for their racial/ethnic ingroup for experiences of sexism. Combining this trend with the finding that participants, irrespective of their own race/ethnicity, anticipate higher support from Black potential allies as compared other potential allies in Study 2, supports the notion that people hold racial stereotypes about which groups will be supportive in a way that is not reducible to shared stigmatization. Stereotypes about emotional expressivity of different racial groups, specifically stereotypes associating Black people with anger (Hugenberg, 2005), and East Asian people with lower emotionality (Adam and Shirako, 2013), may be playing a role in these perceptions.

Regarding the Racial Position Model (Zou & Cheryan, 2017), participants did not consistently anticipate higher support from racial groups who face similar stigma. For example, in Study 1, Black participants anticipated higher support from Hispanic participants as compared to other groups, but Asian participants did not anticipate higher support from Hispanic participants as compared to Black participants. Although further direct tests of the relevance of the Racial Position Model for perceptions of allyship would be useful, these findings suggest that other stereotypes and intergroup perceptions are influencing perceptions more than whether a group

experiences similar stigma based on the dimensions proposed by Zou & Cheryan (2017). In summation, both racial/ethnic and gender-specific stereotypes and shared stigmatization play a role in perceptions of allyship for individual experiencing discrimination, although the degree to which shared stigmatization influences perceptions more so than stereotypes varies based on whether one's shared stigmatized identity is being actively targeted by bias.

Studies 1 and 2 also provide consistent evidence that a record of past allyship behavior was indicative of whether a person would be perceived as an ally in the future. Political action as a past behavior, including participating in protests and donating time and money to organizations, was perceived as most indicative of anticipated support after discrimination. Interpersonal behavior, including confronting interpersonal bias participating in discussions about inclusion, as well as the behavior of educating oneself about discrimination were also viewed as more supportive relative to no information about past behavior. Taken together, the differences in past behavior indicate that the more active and involved the past behavior was (e.g., protesting versus reading about discrimination), the more the behavior was indicative of future support.

We also found that allyship behavior mattered more for allies of different identities relative to the perceiver (race/ethnicity in Study 1; gender in Study 2). For allies with the same race/ethnicity when encountering racism or the same gender when encountering sexism, behavior mattered to some extent, but participants also appeared to give these allies the benefit of the doubt. For allies with differing racial or ethnic groups (Study 1) or for men (Study 2), greater scrutiny is given to past behavior, because past supportive behavior is no longer inferred by identity. These findings imply that although allies of shared identities are generally perceived as more supportive, allies of different identities do have the potential to be perceived as supportive,



and consequently, to meaningfully contribute to anti-racist and anti-sexist causes, if they focus on understanding the perspectives of others and taking action to reduce inequality.

## **9.1 Implications for People with Stigmatized Identities**

For those targeted by racism or sexism, the current work highlights cues, namely race/ethnicity, gender, and past behavior, that are influential in perceiving allyship. These findings have important implications for perceived support and belonging in the workplace and social spaces. As Moser & Branscombe (2021) find, the presence of allies can enhance marginalized individuals' perceptions of support in a new workplace. Therefore, if people targeted by discrimination do not perceive allies to be present in a space, this may lead them to disengage or depart due to a concern that they would not be supported. For example, an Asian woman may look for the presence of Asian employees and other employees of color and pay attention to any allyship behaviors among racial outgroup employees to determine whether she would be supported if she experienced racial bias at work. A Latina woman may look for the presence of female, Black, and Hispanic employees as well as cues to suggest allyship behavior especially among men to determine who to turn to for support if she experienced sexism at her workplace. These implications suggest that diversity and inclusion efforts to both increase representation among groups with underrepresented identities with simultaneously promoting allyship behaviors among people with over-represented and unstigmatized identities would promote perceived support among people of color and women in professional spaces.

## **9.2 Implications for Potential Allies**

Just as these findings for anticipated support have implications for those targeted with discrimination, the findings also have implications for those who are viewed as potential allies. People perceived to be more likely to become angry and take action after discrimination may be

more heavily relied on to provide social support for groups with marginalized identities.

Although having supportive allies is beneficial if someone anticipates experiencing or encounters bias (Hildebrand et al., 2020; Moser & Branscombe, 2021), it may be personally challenging for allies if they are consistently relied on to provide support for many people. The additional labor and responsibilities expected of people of color, women, and to an even greater extent, women of color has been studied in the context of expectations for service work and mentorship in academia (Hirshfield & Joseph, 2012). These extra responsibilities are not commonly considered in evaluation processes, which means that people with marginalized identities are often disadvantaged for promotion and hiring. Additionally, if allies choose to directly confront offensive remarks, they may face backlash such as being viewed as overreacting, especially if they belong to a marginalized group targeted by the comment (Czopp, 2019; Czopp & Monteith, 2003).

### **9.3 Limitations and Future Directions**

In our studies, participants were asked to *envision* that they encountered an offensive racist or sexist comment and were then asked to report who would likely support them. In the real world, perceptions of support may depend on a few additional factors that were not measured in the current study. For instance, it is possible that whether the biased comment was subtle or blatant may influence who people view as supportive in real world situations. Additionally, existing relationships that individuals who are targeted with bias have with potential allies may also influence who they anticipate support from. The current study also investigated *perceptions* of allies, so it is possible that actual trends of who supports whom after bias is experienced do not consistently map on to these perceptions.

The present studies also do not thoroughly investigate the specific psychological mechanisms that are driving the differences of perceiving some groups of people are more supportive than others. Although we find that people generally anticipate more support from potential allies who share the identity that is being negatively targeted in the situation as compared to potential allies of different identities, and that past behavior influences these perceptions, future work should further explore what drives these perceptions. For example, based on the Rejection-Identification Model (Branscombe et al., 1999), it is possible that people who more strongly identify with their stigmatized identities perceive larger gaps in support between ingroup and outgroup members. This would be consistent with findings from Study 2 that for women who have experienced more sexism, and therefore may have had higher gender identification, had greater gaps between perceptions of support of female and male allies as compared to women with lower experiences with sexism. Future work is important to further understand the relationship between level of identification with one's stigmatized group(s) and allyship perception.

## **9.4 Conclusion**

In our studies we find that for individuals experiencing discrimination, determining who will show support is a multifaceted process. Across studies on anti-racism and anti-sexism allyship perception, participants used cues of race/ethnicity and gender of potential allies, shared stigmatization, and past behavior to form beliefs about who would support them. These findings have important implications for interpersonal interactions and person perception which can inform how people with marginalized identities may decide to seek help from others in the stressful situation of experiencing racial or gender bias. Even more broadly, we argue the current work can inform intergroup coalitional building tendencies, or who seeks help from whom, in efforts to reduce racial and gender bias and promote inclusion.

## References

- Adam, H., & Shirako, A. (2013). Not all anger is created equal: The impact of the expresser's culture on the social effects of anger in negotiations. *Journal of Applied Psychology*, 98(5), 785–798. <https://doi.org/10.1037/a0032387>
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology*, 19(6), 586. <https://doi.org/10.1037/0278-6133.19.6.586>
- Babbitt, L. G., Gaither, S. E., Toosi, N. R., & Sommers, S. R. (2018). The Role of Gender in Racial Meta-Stereotypes and Stereotypes. *Social Cognition*, 36(5), 589–601. <https://doi.org/10.1521/soco.2018.36.5.589>
- Brown, V. A. (2021). An Introduction to Linear Mixed-Effects Modeling in R. *Advances in Methods and Practices in Psychological Science*, 4(1), 2515245920960351. <https://doi.org/10.1177/2515245920960351>
- Burrows, B., Preya Selvanathan, H., & Lickel, B. (2021). My Fight or Yours: Stereotypes of Activists From Advantaged and Disadvantaged Groups. *Personality and Social Psychology Bulletin*, 01461672211060124. <https://doi.org/10.1177/01461672211060124>
- Carter, R. T., & Forsyth, J. (2010). Reactions to racial discrimination: Emotional stress and help-seeking behaviors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2(3), 183–191. <https://doi.org/10.1037/a0020102>
- Craig, M. A., & Richeson, J. A. (2016). Stigma-Based Solidarity: Understanding the Psychological Foundations of Conflict and Coalition Among Members of Different

- Stigmatized Groups. *Current Directions in Psychological Science*, 25(1), 21–27.  
<https://doi.org/10.1177/0963721415611252>
- Crenshaw, K. (1990). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, 43(6), 1241–1300.  
<https://heinonline.org/HOL/P?h=hein.journals/stflr43&i=1257>
- Czopp, A. M. (2019). 10—The consequences of confronting prejudice. In R. K. Mallett & M. J. Monteith (Eds.), *Confronting Prejudice and Discrimination* (pp. 201–221). Academic Press. <https://doi.org/10.1016/B978-0-12-814715-3.00005-9>
- Czopp, A. M., & Monteith, M. J. (2003). Confronting Prejudice (Literally): Reactions to Confrontations of Racial and Gender Bias. *Personality and Social Psychology Bulletin*, 29(4), 532–544. <https://doi.org/10.1177/0146167202250923>
- Gill, R., & Matheson, K. (2006). Responses to Discrimination: The Role of Emotion and Expectations for Emotional Regulation. *Personality and Social Psychology Bulletin*, 32(2), 149–161. <https://doi.org/10.1177/0146167205279906>
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197–216. <https://doi.org/10.1037/0022-3514.85.2.197>
- Hildebrand, L. K., Jusuf, C. C., & Monteith, M. J. (2020). Ally confrontations as identity-safety cues for marginalized individuals. *European Journal of Social Psychology*, 50(6), 1318–1333. <https://doi.org/10.1002/ejsp.2692>
- Hirshfield, L. E., & Joseph, T. D. (2012). ‘We need a woman, we need a black woman’: Gender, race, and identity taxation in the academy. *Gender and Education*, 24(2), 213–227.  
<https://doi.org/10.1080/09540253.2011.606208>

- Hugenberg, K. (2005). Social categorization and the perception of facial affect: Target race moderates the response latency advantage for happy faces. *Emotion (Washington, D.C.)*, 5, 267–276. <https://doi.org/10.1037/1528-3542.5.3.267>
- Johnson, P. C. D. (2014). Extension of Nakagawa & Schielzeth's R2GLMM to random slopes models. *Methods in Ecology and Evolution*, 5(9), 944–946. <https://doi.org/10.1111/2041-210X.12225>
- Kaiser, C. R., & Miller, C. T. (2001). Stop Complaining! The Social Costs of Making Attributions to Discrimination. *Personality and Social Psychology Bulletin*, 27(2), 254–263. <https://doi.org/10.1177/0146167201272010>
- Kaiser, C. R., & Miller, C. T. (2003). Derogating the Victim: The Interpersonal Consequences of Blaming Events on Discrimination. *Group Processes & Intergroup Relations*, 6(3), 227–237. <https://doi.org/10.1177/13684302030063001>
- Kim, G., Sellbom, M., & Ford, K.-L. (2014). Race/Ethnicity and Measurement Equivalence of the Everyday Discrimination Scale. *Psychological Assessment*, 26(3), 892–900. <https://doi.org/10.1037/a0036431>
- Leach, C. W., Iyer, A., & Pedersen, A. (2006). Anger and Guilt About Ingroup Advantage Explain the Willingness for Political Action. *Personality and Social Psychology Bulletin*, 32(9), 1232–1245. <https://doi.org/10.1177/0146167206289729>
- Lenth, R. V., Buerkner, P., Herve, M., Love, J., Miguez, F., Riebl, H., & Singmann, H. (2022). *emmeans: Estimated Marginal Means, aka Least-Squares Means (1.7.2)* [Computer software]. <https://CRAN.R-project.org/package=emmeans>

- Liu, D. Y., Strube, M. J., & Thompson, R. J. (2021). Interpersonal Emotion Regulation: An Experience Sampling Study. *Affective Science*, 2(3), 273–288.  
<https://doi.org/10.1007/s42761-021-00044-y>
- Moser, C. E., & Branscombe, N. R. (2021). Male Allies at Work: Gender-Equality Supportive Men Reduce Negative Underrepresentation Effects Among Women. *Social Psychological and Personality Science*, 19485506211033748.  
<https://doi.org/10.1177/19485506211033748>
- Moy, J., & Ng, S. H. (1996). Expectation of outgroup behaviour: Can you trust the outgroup? *European Journal of Social Psychology*, 26(2), 333–340.  
[https://doi.org/10.1002/\(SICI\)1099-0992\(199603\)26:2<333::AID-EJSP747>3.0.CO;2-1](https://doi.org/10.1002/(SICI)1099-0992(199603)26:2<333::AID-EJSP747>3.0.CO;2-1)
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124(1), 54–74. <https://doi.org/10.1037/0033-2909.124.1.54>
- Pengelly, M. (2019, July 15). “Go back home”: Trump aims racist attack at Ocasio-Cortez and other congresswomen. *The Guardian*. <https://www.theguardian.com/us-news/2019/jul/14/trump-squad-tlaib-omar-pressley-ocasio-cortez>
- Radke, H. R. M., Kutlaca, M., Siem, B., Wright, S. C., & Becker, J. C. (2020). Beyond Allyship: Motivations for Advantaged Group Members to Engage in Action for Disadvantaged Groups. *Personality and Social Psychology Review*, 24(4), 291–315.  
<https://doi.org/10.1177/1088868320918698>
- Rimé, B. (2009). Emotion Elicits the Social Sharing of Emotion: Theory and Empirical Review. *Emotion Review*, 1(1), 60–85. <https://doi.org/10.1177/1754073908097189>

- Salter, N. P., & Migliaccio, L. (2019). Allyship as a Diversity and Inclusion Tool in the Workplace. In *Diversity within Diversity Management* (Vol. 22, pp. 131–152). Emerald Publishing Limited. <https://doi.org/10.1108/S1877-636120190000022008>
- Schmitt, M. T., Branscombe, N. R., & Postmes, T. (2003). Women's emotional responses to the pervasiveness of gender discrimination. *European Journal of Social Psychology, 33*(3), 297–312. <https://doi.org/10.1002/ejsp.147>
- Singmann, H., Bolker, B., Westfall, J., Aust, F., Ben-Shachar, M. S., Højsgaard, S., Fox, J., Lawrence, M. A., Mertens, U., Love, J., Lenth, R., & Christensen, R. H. B. (2021). *afex: Analysis of Factorial Experiments* (1.0-1) [Computer software]. <https://CRAN.R-project.org/package=afex>
- Swim, J. K., Hyers, L. L., Cohen, L. L., & Ferguson, M. J. (2001). Everyday Sexism: Evidence for Its Incidence, Nature, and Psychological Impact from Three Daily Diary Studies. *Journal of Social Issues, 57*(1), 31–53. <https://doi.org/10.1111/0022-4537.00200>
- Taylor, S. E. (2011). *Social Support: A Review*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195342819.013.0009>
- Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review, 107*(3), 411. <https://doi.org/10.1037/0033-295X.107.3.411>
- Triana, M. del C., Jayasinghe, M., & Pieper, J. R. (2015). Perceived workplace racial discrimination and its correlates: A meta-analysis. *Journal of Organizational Behavior, 36*(4), 491–513. <https://doi.org/10.1002/job.1988>



- Williams, D. R., Yan Yu, Jackson, J. S., & Anderson, N. B. (1997). Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination. *Journal of Health Psychology, 2*(3), 335–351. <https://doi.org/10.1177/135910539700200305>
- Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. *Emotion, 13*(5), 803–810. <https://doi.org/10.1037/a003383>