Racial Issues in America: Ingroup Projection Within Disadvantaged Groups

By

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In

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Abstract

This research examined whether inter-disadvantaged group allyship is a function of ingroup projection onto the disadvantaged group category. In two studies, I assessed whether Black Americans are more willing to engage in collective action on behalf of their group and less willing to do so on behalf of disadvantaged outgroups to the extent that ingroup projection occurred. In Study 1 (N=171), projection was a predictor of willingness to engage in collective action on behalf of the ingroup, but not on behalf of two disadvantaged outgroups. Study 2 (N=306) replicated and extended the results of Study 1 by showing that inter-disadvantaged group allyship emerges by way of projection but only when competitive victimhood is low. This research demonstrates not only that ingroup projection onto a disadvantaged group category occurs but that this projection has implications not only for collective action on behalf of the ingroup but also inter-disadvantaged group allyship.
Acknowledgements

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Racial Issues in America: Ingroup Projection Within Disadvantaged Groups

Following the murder of George Floyd in 2020 and the shooting of six Asian women by a gunman in 2021, many Americans of Asian and Black decent began wearing ‘Black-Asian Unity’ T-shirts during protests in the spring of 2021. Additionally, speakers at the protest promised to unite and cooperate to end the violence and discrimination against disadvantaged groups in America (Browning & Chen, 2021). From a social justice perspective, such inter-disadvantaged group allyship (i.e., active support for the rights of another social group; see Brown & Ostrove, 2013; Jolly et al., 2021) is of import because the support of other groups is often required to achieve a social movement’s goals (see Bruneau et al., 2017; Feinberg et al., 2017; Orazani & Leidner, 2019; Tausch et al., 2011; Thomas & Louis, 2014). This is, in part, why there has been growing academic interest in intergroup allyship (e.g. Gates et al., 2021; Wellman, 2022). However, contemporary work on allyship has been, almost exclusively, focused on when and why advantaged group members engage in collective action in support of disadvantaged groups (e.g., Robinson, 2022; Selvanathan et al., 2018). Neglected have been contexts in which disadvantaged groups—groups that are presumably competing for similar scarce resources—become allies of other disadvantaged groups.

From a social identity theory perspective (Tajfel & Turner, 1986), members of a particular social group are motivated to advance the interests of fellow ingroup members at the expense of outgroups. This is especially the case when there are finite resources (Tajfel et al., 1971). Yet, 68% of Asian Americans and 60% of Hispanic/Latino Americans expressed support for Black Lives Matter (DeAngelis, 2022)—a social movement that aims to make salient the systemic racism against Black individuals in the United States (and elsewhere), and seeks redress for the disadvantages Black Americans have and continue to experience (see Chase, 2017).
Moreover, in a study of public opinions on #StopAsianHate, Lyu et al. (2021) found that a little less than half of Black Americans and a little over half of Hispanic/Latino Americans expressed their support for this social movement to end hate crimes against Asian Americans. Thus, although there is evidence of inter-disadvantaged group support for their respective social movements, it is not rampant.

The purpose of the current research was to better understand allyship among disadvantaged group members. Specifically, I examined the conditions under which Black Americans expressed support and willingness to engage in collective action on behalf of their ingroup (e.g., support for Black Lives Matter [BLM]) as well as on behalf of other groups that are disadvantaged (e.g., support for #StopAsianHate [SAH]). To do so, I tested the idea that allyship between disadvantaged groups is a product of the extent to which disadvantaged groups engage in ingroup projection—the phenomenon in which members of an ingroup believe that their standards and norms are more prototypical of a higher-order superordinate group than a given outgroup (Wenzel et al., 2003). To this end, two studies were conducted with Black Americans to assess whether support and willingness to engage in collective action on behalf of the ingroup and other disadvantaged groups is a function of the extent to which Black Americans project their group onto the superordinate disadvantaged group category. I expected that to the extent that Black Americans engaged in ingroup projection onto the disadvantaged group category, there would be relatively more support and greater willingness to engage in collective action in support of the ingroup and less support for the other disadvantaged groups.

**Allyship and Disadvantaged Groups**

Collective action (i.e., action undertaken by individuals on behalf of a group to achieve a group’s goals; van Zomeren, 2016; Wright et al., 1990) is not for the faint of heart. Structural
social changes that address the disadvantages a group experiences take time, and any advances made often prove to be short-term (Smith, et al., 2019). In fact, given people’s tendency to justify the social system that they are a part of (see Jost & van der Toorn, 2012), the most striking part of collective action on behalf of disadvantaged groups is perhaps that action is taken at all. In part, as a result, Louis (2009) called for dedicated research attention to be focused on factors that help advance the collective action of disadvantaged groups.

Since Louis’ (2009) call, most social psychological theory and research has focused on the motivations of disadvantaged group members to engage in collective action (see Van Zomeren & Iyer, 2009). Yet, the ability of a disadvantaged group to achieve its goals often requires the support of other groups (i.e., allies; see Bruneau et al., 2017; Feinberg et al., 2017; Orazani & Leidner, 2019; Tausch et al., 2011; Thomas & Louis, 2014). This is because public opinion has a substantial effect on public policy (Burstein, 2003; Burstein & Linton, 2002). Consequently, disadvantaged groups can help advance their group’s goals by transforming inactive sympathizers to active supporters (for a review see Chenoweth et al., 2011). Additionally, the presence of such allies can further encourage members of disadvantaged groups to support and engage in collective action on their own group’s behalf (Droogendyk et al., 2016), thus building momentum toward social change.

History is, of course, replete with examples of disadvantaged groups finding an ally in members of the advantaged group. For instance, following a recent swath of police shootings of unarmed Black men in the United States (U.S.), many White Americans voiced support for BLM (Luttrell, 2019). To better understand such allyship, another growing branch of collective action research (see Brown & Ostrove, 2013; Stefaniak et al., 2020; Subašić et al., 2008) has focused on the conditions under which individuals from one social group express support for another social
group. However, existing research on allyship investigated almost exclusively when members of advantaged groups support the activism of disadvantaged groups (e.g., Kessler et al., 2010; Wang et al., 2018)—activism that will presumably result in the diminishment of their own group’s privilege and status. A paucity of empirical work has been conducted on when members of one disadvantaged group support and are willing to engage in collective action on behalf of another disadvantaged group (i.e., inter-disadvantaged group allyship).

Given disadvantaged groups within a given society are presumably competing for the same scarce resources (e.g., status, power), inter-disadvantaged group allyship should have little utility. In fact, a conservative reading of social identity theory (Tajfel & Turner, 1986) and research stemming from the minimal group paradigm (Tajfel, 1970; Tajfel et al., 1971) supports such a supposition. However, disadvantaged groups often have shared historical and social experiences, allowing them to find unique commonalities (Craig & Richeson, 2016). Moreover, their disadvantages distinguish them from advantaged groups, which may create a sense of unity among disadvantaged groups in the fight for equality.

Nonetheless, allyship between disadvantaged groups is complicated by an array of factors. For instance, disadvantaged group members who engage in competitive victimhood (i.e., competing for the status of the ultimate victim) or who hold zero-sum beliefs (i.e., perceiving that social resources are finite, and gains for other disadvantaged groups mean losses for their own group) are less likely to express support for other disadvantaged groups (Gay, 2006; Young & Sullivan, 2016). Of course, disadvantaged groups can and do support each other’s social movements. Indeed, the majority of Asian Americans and Hispanic/Latino Americans express support for BLM (DeAngelis, 2022), and slightly less than half of Black Americans and slightly more than half of Hispanic/Latino Americans expressed their support for #StopAsianHate (Lyu
et al., 2021). Herein, I contend that a heretofore unexamined factor that is critical for understanding inter-disadvantaged group allyship is ingroup projection onto the superordinate disadvantaged group category.

**Ingroup Projection and inter-Disadvantaged Group Allyship**

According to the ingroup projection model (IPM; Mummendey & Wenzel, 1999; Wenzel et al., 2008), group members tend to perceive their own group (e.g., White Americans) to be more prototypical of a higher-order superordinate group (e.g., Americans) than relevant outgroups (e.g., Black Americans), and as a result see the ingroup as more normative and positive than those relevant outgroups. In line with social categorization theory (Turner et al., 1987), IPM assumes that people use social categories to structure and give meaning to their social world. The groups to which people perceive themselves to belong help to contextually define their sense of self (i.e., their social identity; see Tajfel & Turner, 1986), and thus self-categorization is the cognitive component of social identity. Comparisons between the ingroup and relevant outgroups imply that both are included in a superordinate, more inclusive category (Turner et al., 1987). Importantly, theory and research stemming from IPM perspective has shown that the more prototypical of the superordinate category the ingroup is perceived to be relative to a comparison group, the more people value their ingroup and the more deserving the ingroup is perceived to be (see Bell et al., 2021; Bianchi et al., 2010; Wenzel, 2004).

Ingroup projection has also been shown to result in negative attitudes and behaviours towards outgroups (see Wenzel et al., 2016) and justification of prejudice toward comparison outgroups. For instance, Kessler et al. (2010) found that ingroup projection onto the category ‘Germans’ predicts resentment, a lack of intergroup contact, and competitive behaviours towards immigrants in Germany. There is also preliminary evidence that there is an association between
ingroup projection by advantaged groups’ members and a lack of support for disadvantaged groups. Huynh et al. (2015), for example, found that ingroup projection by Caucasian Americans onto the superordinate category of ‘Americans’ lead to support for policies that limit the rights and opportunities of both Asian Americans and Latino/Hispanic Americans. However, to my knowledge, no research has been conducted on whether disadvantaged groups project onto the superordinate ‘disadvantaged group’ category, and the consequences for inter-disadvantaged group allyship should disadvantaged groups engage in ingroup projection onto such a category.

One potential stumbling block for assessing inter-disadvantaged group allyship in the context of the IPM is whether members of a disadvantaged group will project their group onto the superordinate ‘disadvantaged group’ category. In line with the SIT (Tajfel & Turner, 1986), a strategy that members of disadvantaged groups may use when faced with belonging to a group with relatively low status is to abandon the group physically or psychologically. People prefer to be evaluated positively by themselves and others (Taylor & Brown, 1988), therefore, it is possible that Black Americans may be reluctant to project onto the superordinate ‘disadvantaged groups in America’ category due to both the perceived low status of the group, and the negative connotations that come with being a part of a disadvantaged group. However, other research suggests that disadvantaged groups may engage in ingroup projection, even though such a category is associated with low status. They may do so, in part, to stress the disadvantages their group experiences relative to other groups and the need for redress (see Van Knippenbrg & Van Oers, 1984). Additionally, research stemming from the Rejection-Identification Model (Branscombe et al., 1999) suggests that disadvantaged group members tend to respond to prejudice against their group with stronger ingroup identification. It is possible that such identification in the face of prejudice and low status may manifest in disadvantaged group
members perceiving that their group is the prototypical disadvantaged group. I assessed whether disadvantaged group members engaged in ingroup projection onto the disadvantaged group category as well as its consequences for inter-disadvantaged group allyship among Black Americans—a disadvantaged group that faces a great deal of prejudice in the western world (Horowitz et al., 2019).

**Overview of the Proposed Research**

The purpose of the current research was to better understand allyship among disadvantaged groups through the lens of ingroup projection. First, I wanted to determine the extent to which disadvantaged groups (here: Black Americans) engage in ingroup projection, where they project onto the superordinate group ‘disadvantaged groups in America’. Second, I wanted to determine the effect that ingroup projection (or lack thereof) has on support for one's own and other disadvantaged groups (here: Asian Americans and Latino/Hispanic Americans), as well as their willingness to engage in collective action on behalf of these groups.

In Study 1, I hypothesized that support for a social movement to advance the interests of one’s own disadvantaged group, and lack of support for the social movements of other disadvantaged groups, would be a function of the extent to which members of a disadvantaged group project their group and two relevant outgroups onto a superordinate ‘disadvantaged group’ category. Specifically, I hypothesized that (1) Black Americans would be more willing to support Black Lives Matter, and (2) less willing to support Stop Asian Hate and the Dreamers movement, to the extent that they believe that Black Americans are the prototypical disadvantaged group in America, and that (3) Black Americans would be more willing to support the outgroup social movements to the extent that they engage in outgroup projection (i.e., they perceive the outgroup to be prototypical of the superordinate ‘disadvantaged groups in America’
category). I used two measures of ingroup projection: a trait-rating task (see Waldzus et al., 2004) in which participants rated the extent to which self-generated traits that are representative of their own group and other groups are also representative of a superordinate category, and a Venn diagram task (see Waldzus & Mummendey, 2004) that asked participants to rate the extent to which the ingroup as well as relevant outgroups overlap with a superordinate category.

In Study 2, I extended Study 1 by further examining the associations between ingroup projection and collective action support on behalf of the ingroup and two outgroups (in Study 2; Latino/Hispanic Americans and Native Americans). I also examined the extent to which competitive victimhood between the ingroup (Black Americans) and target disadvantaged groups (Latino/Hispanic and Native Americans) is associated with collective action support and resource allocation on behalf of all three subgroups. Based on findings from Study 1, I only used the more intuitive Venn-diagram measure to assess ingroup projection in Study 2.

Studies 1 and 2 were pre-registered prior to data collection.¹ Pre-registrations for this research can be found through Open Science Framework (https://osf.io/mke6w) and As Predicted (https://aspredicted.org/67P_RFM). This research was also reviewed and cleared by the Carleton University Psychology Research Ethics Board–B.

¹ Analyses conducted in Study 1 have slightly diverged from pre-registration analyses. The Study 1 pre-registration states that all analyses would be conducted twice, once among participants who received a version of the questionnaire with ‘disadvantaged groups in America’ as the superordinate group, and again with participants who received a version of the questionnaire with ‘minority groups in America’ as the superordinate group. Study 1, however, only includes analyses from the ‘disadvantaged groups in America’ condition. This is because Study 1 results showed that the associations between ingroup projection and collective action support for the ingroup and outgroups were stronger when the ‘disadvantaged groups’ term was used, and I wanted to further examine these associations in Study 2. Furthermore, the pre-registration states that regression analyses would be conducted with difference scores between Black American prototypicality and both Asian American and Latino/Hispanic American prototypicality. These analyses were not conducted in Study 2 because absolute projection scores allowed me to gauge whether it was the presence of ingroup projection or the lack of outgroup projection that was associated with support for the ingroup and outgroups. Last, the pre-registration states that a mediation analysis would be conducted. These analyses were not conducted, as I wanted to first assess whether competitive victimhood moderates the relationship between ingroup projection and collective action.
Study 1

Method

Participants and Procedure

Participants were recruited using Amazon’s CloudResearch (www.cloudresearch.com/), which is an online crowdsourcing website that allows participants to complete small surveys for monetary compensation. The online survey took participants, on average, 14.36 minutes to complete ($SD = 10.78$), and participants were paid $0.70 USD.

A recruitment notice was available to MTurk workers that described the nature of the study. Interested participants were able to click on a hyperlink, where they granted consent and then were directed to several items to determine if they were eligible for the study. To be eligible for the study, participants had to identify as a Black American, be at least 18 years of age, be an American citizen, and reside in the US. If they were determined not to be eligible, they were re-directed to the Ineligibility Debriefing. If they were eligible, they were able to complete the survey, followed by questions about the honesty of their answers and a debriefing.

Eligible participants completed a series of items assessing the extent to which they engaged in ingroup projection (i.e., whether they saw their own group as typical/atypical of the superordinate group and whether they saw both Asian Americans and Latino/Hispanic Americans as typical/atypical of the superordinate group), as well as items assessing their support and willingness to engage in collective action on behalf of the three subgroups, and some further items that were not examined in the current research (e.g., identification and valence measures, ingroup projection onto the superordinate category of ‘Americans’). When participants completed the survey, they were debriefed and compensated.

An a priori power analysis was conducted using G*power (Faul et al., 2009) to determine the sample size required to test the relation between ingroup projection, support, and willingness
to engage in collective action using a multiple regression analysis with three variables. The initial power analysis was conducted for a study with two conditions; one condition in which participants project onto ‘minority groups in America’ and one condition in which participants project onto ‘disadvantaged groups in America’ (see Footnote 1 for more detail). However, only data from the latter condition were analysed and are reported in this research. For the analyses of the ‘disadvantaged groups in America’ condition only, $N = 119$ participants were required to detect a small effect with 90% power and $\alpha = .05$. An additional 20% (24 participants) were also needed to account for poor data quality.

Two hundred and nine participants were recruited in this study. Of these, two participants were excluded for reporting that they did not provide high-quality responses, one participant was excluded because they said that they did not provide honest answers, two participants were excluded for leaving trait measures blank, nine participants were excluded for not passing an attention check, 14 participants were excluded for providing physical characteristics in the trait listing task (instructions stated that physical characteristics were not acceptable), and 10 participants were excluded for providing nonsensical answers. The final sample consisted of $N = 171$ participants (62 males, 108 females, one non-binary/third gender). Participants’ ages ranged from 20 to 70 years ($M = 36.15$, $SD = 10.99$).

**Measures**

Participants completed the following measures:

**Ingroup Projection (Trait Rating).** Ingroup projection was first measured using a trait-rating task adapted from Waldzus et al. (2003), in which the participants were asked to think of and write down three typical traits or qualities that they believed were most characteristic of Asian Americans, Latino/Hispanic Americans, and Black Americans. They were instructed to
use one word for each trait and not to use words that describe physical characteristics. After they listed the traits, the participants were asked to rate each trait on how characteristic it is of ‘disadvantaged groups in America’ in general. The ratings were anchored at 1 (Not at all characteristic of disadvantaged groups) and 7 (Very characteristic of disadvantaged groups). Projection scores were calculated for each subgroup by taking the mean of the three ratings (separately for each subgroup; $\alpha = .81$ [Asian American traits]; $\alpha = .78$ [Latino/Hispanic American traits]; $\alpha = .84$ [Black American traits]).

**Ingroup Projection (Venn Diagrams).** Ingroup projection was also measured using Venn diagrams adapted from Aron et al. (1991) to represent intergroup relations (Schubert & Otten, 2002). Participants were presented with a series of seven Venn diagrams with a target disadvantaged group (e.g., Asian Americans) in the first circle, and the superordinate group (disadvantaged groups in America) in the second circle. The first Venn diagram presented the two circles as separate, with each following diagram presenting the circles closer together, leading to the seventh diagram showing the circles as completely overlapping. The participants were asked to indicate how typical each of the three groups of interest (Asian Americans, Latino/Hispanic Americans, and Black Americans) are of ‘disadvantaged groups in America’ in general by choosing one of the seven diagrams.

**Support for Subgroups.** Support for Stop Asian Hate, the Dreamers movement, and the Black Lives Matter movement were measured using a scale from 0 to 100. Participants were provided with a brief description of each of the three social movements and asked to indicate the extent to which they support the movement on the scale anchored at 0 (I do not support at all) and 100 (I fully support).
Collective Action Support. Intentions to support collective action on behalf of the Stop Asian Hate movement, the Dreamers movement, and the Black Lives Matter movement were each measured using four items adapted from Stefaniak et al. (2020): “I would take part in a protest against racism towards [target disadvantaged group]”, “I would donate money to [target disadvantaged group social movement]”, “I would volunteer my time to raise funds for [target disadvantaged group social movement]”, and “I would share a pro- [target disadvantaged group social movement] story on my social media (e.g., Facebook, Twitter)”. Each item was anchored at 1 (Strongly disagree) and 7 (Strongly agree). Composite support scores were calculated for each movement as an average answer to the four items with higher scores indicating more willingness to engage in collective action on behalf of the group, α = .91 [Stop Asian Hate]; α = .92 [Dreamers Movement]; α = .94 [Black Lives Matter].

Analyses were performed using the Statistical Package for the Social Sciences (SPSS), version 28.0 for MAC (IBM Corporation, 2020). To examine the relationship between ingroup projection and both support for and willingness to engage in collective action on behalf of all three target disadvantaged groups (Asian Americans, Latino/Hispanic Americans, and Black Americans), Pearson's correlation and a series of multiple linear regressions were used.

Results

Ingroup Projection Measured with the Trait-Rating Task

I first examined the possible effect of ingroup projection on support for the ingroup and the two target outgroups using the trait-based measure of ingroup projection. Table 1 presents the means, standard deviations, and correlation coefficients between this measure of projection and the other measured variables.
**Preliminary Analyses.** To determine whether Black Americans engaged in ingroup projection (i.e., perceiving Black Americans to be more prototypical of the superordinate ‘disadvantaged groups in America’ category than both Asian Americans and Latino/Hispanic Americans), a repeated measures one-way ANOVA was conducted with projection (of Black Americans, Asian Americans, and Latino/Hispanic Americans onto the ‘disadvantaged groups in America’ category) as the within-participants factor. There was a significant projection effect for three groups, $F(2, 170) = 26.41, p < .001, \eta^2 = .11$. Pairwise comparisons indicated that projection onto the ‘disadvantaged groups in America’ category was significantly higher for Black Americans ($M=5.27; SD=1.34$) than Asian Americans ($M=4.56; SD=1.48$), $p < .001$, higher for Black Americans than Latino/Hispanic Americans ($M=4.92; SD=1.35$), $p < .001$, and higher for Latino/Hispanic Americans than Asian Americans, $p < .001$. To the point, Black Americans perceived their group to be more prototypical of the disadvantaged group category than the target outgroups. Descriptive statistics associated with projection scores of the three groups are reported in Table 1.

A correlational analysis of projection for all target disadvantaged groups, as well as support and collective action support for the ingroup and both outgroups was then conducted. Perceiving Black Americans to be prototypical of the ‘disadvantaged’ superordinate group was not correlated with support of or willingness to engage in collective action on behalf of any disadvantaged group (including the ingroup). Perceiving Asian Americans as prototypical of the ‘disadvantaged’ superordinate category was positively correlated with both support for and willingness to engage in collective action on behalf of all three target groups (i.e., Black, Asian, and Latino/Hispanic Americans). Lastly, perceiving Latino/Hispanic Americans as more prototypical of the superordinate group was positively correlated with both support for and
willingness to engage in collective action on behalf of Asian Americans and Latino/Hispanic Americans, but not Black Americans.
### Table 1. Means, standard deviations, and correlations between variables when trait-rating task was used to measure projection.

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>1.</th>
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<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black American projection</td>
<td>5.27 (1.34)</td>
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<tr>
<td>2. Asian American projection</td>
<td>4.56 (1.48)</td>
<td>.448**</td>
<td></td>
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<tr>
<td>3. Latino/Hispanic American projection</td>
<td>4.92 (1.35)</td>
<td>.655**</td>
<td>.659**</td>
<td></td>
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<tr>
<td>4. Support for Black Lives Matter</td>
<td>74.44 (34.67)</td>
<td>.024</td>
<td>.224**</td>
<td>.096</td>
<td></td>
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<tr>
<td>5. Support for Stop Asian Hate</td>
<td>78.61 (29.97)</td>
<td>.035</td>
<td>.192*</td>
<td>.156*</td>
<td>.581**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Support for the Dreamers Movement</td>
<td>70.96 (31.68)</td>
<td>.024</td>
<td>.263**</td>
<td>.152*</td>
<td>.671**</td>
<td>.802**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Collective Action Support for Black Lives Matter</td>
<td>4.46 (1.95)</td>
<td>.004</td>
<td>.250**</td>
<td>.120</td>
<td>.761**</td>
<td>.385**</td>
<td>.463**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Collective Action Support for Stop Asian Hate</td>
<td>4.04 (1.68)</td>
<td>.059</td>
<td>.353**</td>
<td>.222**</td>
<td>.461**</td>
<td>.588**</td>
<td>.521**</td>
<td>.639**</td>
<td></td>
</tr>
<tr>
<td>9. Collective Action Support for the Dreamers Movement</td>
<td>4.01 (1.95)</td>
<td>.064</td>
<td>.363**</td>
<td>.215**</td>
<td>.548**</td>
<td>.587**</td>
<td>.687**</td>
<td>.711**</td>
<td>.844**</td>
</tr>
</tbody>
</table>

*Note: *p < .05, **p < .01*
**Multiple Regression.** A series of multiple regression analyses were conducted to assess whether projection of all three target disadvantaged groups onto the ‘disadvantaged groups in America’ category predicted support of the ingroup’s and outgroups’ social movements, and intentions to engage in collective action on behalf of the ingroup and outgroups. First, I used the prototypicality of group traits as predictors of support of the ingroup and outgroups as well as willingness to engage in collective action on behalf of the ingroup and outgroups.

In the model with support for the Black Lives Matter movement as the dependent variable, projection of all three target disadvantaged groups together accounted for 7% of the variance in support for BLM, $F(3, 167) = 4.17, p = .007$. Perceiving Asian Americans as prototypical of the superordinate group was the only significant predictor of support for BLM, $\beta = 6.75, t = 2.91, p = .004$. It was also found that projection of all three target groups together accounted for 7.7% of the variance in willingness to engage in collective action on behalf of BLM, $F(3, 167) = 4.66, p = .004$. Perceiving Asian Americans as prototypical of the superordinate ‘disadvantaged group in American’ category was the only significant (and positive) predictor of willingness to engage in collective action on behalf of BLM, $\beta = .40, t = 3.10, p = .002$. See Table 2 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for Black Lives Matter are used as separate outcome variables.
Table 2. Projection of target disadvantaged groups as predictors of support and collective action support for BLM

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Support for BLM</th>
<th>Collective Action for BLM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( SE )</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>-4.14</td>
<td>2.55</td>
</tr>
<tr>
<td>Asian American Projection</td>
<td>6.75</td>
<td>2.32</td>
</tr>
<tr>
<td>Latino American Projection</td>
<td>0.27</td>
<td>3.02</td>
</tr>
</tbody>
</table>

\( \Delta R^2 \) \( .05^* \) \( .08^* \)

Note. * \( p < .05 \), ** \( p < .001 \)

In the model with support for Stop Asian Hate as the dependent variable, projection of all three target disadvantaged groups together accounted for 4.7% of the variance in support for SAH, \( F(3, 167) = 2.75, p = .044 \). The projection scores, however, were not significant predictors individually. It was also found that projection of all three target disadvantaged groups together accounted for 13.9% of the variance in willingness to engage in collective action on behalf of SAH, \( F(3, 167) = 9.02, p < .001 \). Perceiving Asian Americans as prototypical of the superordinate group was the only significant (and positive) predictor of willingness to engage in collective action on behalf of SAH, \( \beta = .42, t = 3.87, p < .001 \). See Table 3 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for Stop Asian Hate are used as separate outcome variables.
Table 3. Projection of target disadvantaged groups as predictors of support and collective action support for Stop Asian Hate

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Support for SAH</th>
<th>Collective Action for SAH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>0.63</td>
<td>1.70</td>
</tr>
<tr>
<td>Asian American Projection</td>
<td>1.73</td>
<td>1.63</td>
</tr>
<tr>
<td>Latino American Projection</td>
<td>4.58</td>
<td>2.05</td>
</tr>
</tbody>
</table>

ΔR² 0.71* 0.16**

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

In the model with support for the Dreamers Movement as the dependent variable, the projection scores of all three target disadvantaged groups together accounted for 8.1% of the variance in support for the Dreamers Movement, F (3, 167) = 4.94, p = .003. Perceiving Asian Americans as prototypical of the superordinate group was the only significant, positive predictor of support for the Dreamers Movement, β = 6.24, t = 2.96, p = .004. It was also found that projection of all three target disadvantaged groups together accounted for 14.5% of the variance in willingness to engage in collective action on behalf of the Dreamers Movement, F (3, 167) = 9.42, p < .001. Perceiving Asian Americans as prototypical of the superordinate group was the only significant predictor of willingness to engage in collective action on behalf of the Dreamers Movement, β = .46, t = 4.14, p < .001. See Table 4 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for the Dreamers Movement are used as separate outcome variables.
Table 4. Projection of target disadvantaged groups as predictors of support and collective action support for the Dreamers Movement

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Support for Dreamers</th>
<th>Collective Action for Dreamers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>-3.31</td>
<td>2.31</td>
</tr>
<tr>
<td>Asian American Projection</td>
<td>6.24</td>
<td>2.11</td>
</tr>
<tr>
<td>Latino American Projection</td>
<td>1.22</td>
<td>2.74</td>
</tr>
</tbody>
</table>

ΔR² 0.07* 0.13**

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

Ingroup Projection Measured with the Venn Diagram Task

I next re-ran all the analyses using the Venn Diagram measure of projection. Table 5 presents the means, standard deviations, and correlation coefficients between projection measured with the Venn-diagram task and the other measured variables.

Preliminary Analyses. To determine whether Black Americans engaged in ingroup projection (i.e., perceiving Black Americans to be more prototypical of the superordinate ‘disadvantaged groups in America’ category than both Asian Americans and Latino/Hispanic Americans), a repeated measures one-way ANOVA was conducted with projection (of Black Americans, Asian Americans, and Latino/Hispanic Americans onto the ‘disadvantaged groups in America’ category) as the within-participants factor. There was a significant projection effect for three groups, F (2, 170) = 116.02, p < .001, η² = .34. Pairwise comparisons indicated that projection onto the ‘disadvantaged groups in America’ category was significantly higher for Black Americans (M=5.39; SD=1.63) than Asian Americans (M=3.24; SD=1.57), p < .001, higher for Black Americans than Latino/Hispanic Americans (M=4.55; SD=1.44), p < .001, and higher for Latino/Hispanic Americans than Asian Americans, p < .001. To the point, Black Americans perceived their group to be more prototypical of the disadvantaged group category than the target outgroups. Descriptive statistics associated with projection scores of the three groups are reported in Table 5.
A correlational analysis of projection for all target disadvantaged groups, as well as support and collective action support for the ingroup and both outgroups was then conducted. Perceiving Black Americans as prototypical of the superordinate ‘disadvantaged groups’ category was positively correlated with support for and willingness to engage in collective action on behalf of Black Lives Matter as well as willingness to engage in collective action on behalf of the Dreamers Movement. Perceiving Asian Americans as prototypical of the superordinate disadvantaged groups category was positively correlated with support for Stop Asian Hate and the Dreamers Movement as well as willingness to engage in collective action on behalf of all three disadvantaged groups. Lastly, perceiving Latino/Hispanic Americans as prototypical of the superordinate ‘disadvantaged groups’ category was positively correlated with support for and willingness to engage in collective action on behalf of all three groups.
Table 5. Means, standard deviations, and correlations between variables when Venn-diagram task was used to measure projection.

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black American projection</td>
<td>5.39 (1.63)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Asian American projection</td>
<td>3.24 (1.57)</td>
<td>.028</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Latino/Hispanic American projection</td>
<td>4.55 (1.44)</td>
<td>.495**</td>
<td>.354**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Support for Black Lives Matter</td>
<td>74.44 (34.67)</td>
<td>.197**</td>
<td>.136</td>
<td>.205**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Support for Stop Asian Hate</td>
<td>78.61 (29.97)</td>
<td>.046</td>
<td>.242**</td>
<td>.301**</td>
<td>.581**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Support for the Dreamers Movement</td>
<td>70.96 (31.68)</td>
<td>.138</td>
<td>.160*</td>
<td>.255**</td>
<td>.671**</td>
<td>.802**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Collective Action Support for Black Lives Matter</td>
<td>4.46 (1.95)</td>
<td>.288**</td>
<td>.237**</td>
<td>.236**</td>
<td>.761**</td>
<td>.385**</td>
<td>.463**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Collective Action Support for Stop Asian Hate</td>
<td>4.05 (1.68)</td>
<td>.091</td>
<td>.435**</td>
<td>.308**</td>
<td>.461**</td>
<td>.588**</td>
<td>.521**</td>
<td>.639**</td>
<td>-</td>
</tr>
<tr>
<td>9. Collective Action Support for the Dreamers Movement</td>
<td>4.01 (1.72)</td>
<td>.157*</td>
<td>.348**</td>
<td>.290**</td>
<td>.548**</td>
<td>.587**</td>
<td>.687**</td>
<td>.711**</td>
<td>.844**</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01
**Multiple Regression.** Next, I used the Venn diagram scores as predictors of support of the ingroup and outgroups as well as willingness to engage in collective action on behalf of the ingroup and outgroups. Projection of all three target disadvantaged groups together accounted for 6.2% of the variance in support for Black Lives Matter, $F (3, 167) = 3.68, p = .013$. There were no significant individual predictors in this model. Projection scores accounted for 13.5% of the variance in willingness to engage in collective action on behalf of BLM, $F (3, 167) = 8.72, p < .001$. Significant, positive predictors of willingness to engage in collective action on behalf of BLM included perceiving Asian Americans as prototypical of the superordinate group, $\beta = 0.22, t = 3.10, p = .002$, as well as perceiving Black Americans as prototypical of the superordinate group, $\beta = 0.27, t = 3.20, p = .002$. See Table 6 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for Black Lives Matter are used as separate outcome variables.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Support for BLM</th>
<th>Collective Action for BLM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>3.10</td>
<td>1.86</td>
</tr>
<tr>
<td>Asian American Projection</td>
<td>2.13</td>
<td>1.80</td>
</tr>
<tr>
<td>Latino American Projection</td>
<td>2.36</td>
<td>2.26</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.05*</td>
<td></td>
</tr>
</tbody>
</table>

*Note. *$p < .05$, **$p < .001$*
In the model with support for Stop Asian Hate as the dependent variable, projection of all three target disadvantaged groups together accounted for 12% of the variance in support for SAH, \( F(3, 167) = 7.62, p < .001 \). Perceiving Latino/Hispanic Americans as prototypical of the superordinate group was the only significant, positive predictor of support for SAH, \( \beta = 0.31, t = 3.39, p < .001 \). Projection of all three target disadvantaged groups together accounted for 21.6% of the variance in willingness to engage in collective action on behalf of SAH, \( F(3, 167) = 15.34, p < .001 \). Significant predictors of willingness to engage in collective action on behalf of SAH included perceiving Asian Americans as prototypical of the superordinate group, \( \beta = 0.37, t = 4.98, p < .001 \), as well as perceiving Latino/Hispanic Americans as prototypical of the superordinate group, \( \beta = 0.18, t = 2.11, p = .036 \). See Table 7 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for Stop Asian Hate are used as separate outcome variables.

| Dependent variable: | Support for SAH | | | Collective Action for SAH | | |
|---------------------|----------------|-------------|----------------|----------------|-------------|
|                     | \( B \) | \( SE \) | \( \beta \) | \( B \) | \( SE \) | \( \beta \) |
| Black American Projection | -2.03 | 1.56 | -0.11 | -0.01 | 0.08 | -0.009 |
| Asian American Projection | 2.58 | 1.50 | 0.14 | 0.40 | 0.08 | 0.37** |
| Latino American Projection | 6.41 | 1.89 | 0.31** | 0.21 | 0.10 | 0.18* |
| \( \Delta R^2 \) | 0.11** | | | 0.20** | |

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

In the model with support for the Dreamers Movement as the dependent variable, projection scores of all three target disadvantaged groups accounted for 7.1% of the variance in support for the Dreamers Movement, \( F(3, 167) = 4.27, p = .006 \). Perceiving Latino/Hispanic
Americans as prototypical of the superordinate disadvantaged group category was the only significant predictor of support for the Dreamers Movement, $\beta = 0.21, t = 2.23, p = .027$.

Projection of all three target disadvantaged groups together accounted for 15.7% of the variance in willingness to engage in collective action on behalf of the Dreamers Movement, $F (3, 167) = 10.38, p < .001$. Perceiving Asian Americans as prototypical of the superordinate category was the only significant, positive predictor of willingness to engage in collective action on behalf of the Dreamers Movement, $\beta = 0.29, t = 3.79, p < .001$. See Table 8 for the multiple regression results when projection of all three disadvantaged groups were used as the predictor variables, and both support for and willingness to engage in collective action for the Dreamers Movement are used as separate outcome variables.

### Table 8. Projection of target disadvantaged groups as predictors of support and collective action support for the Dreamers Movement

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Support for Dreamers</th>
<th>Collective Action for Dreamers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>0.63</td>
<td>1.70</td>
</tr>
<tr>
<td>Asian American Projection</td>
<td>1.73</td>
<td>1.63</td>
</tr>
<tr>
<td>Latino American Projection</td>
<td>4.58</td>
<td>2.05</td>
</tr>
</tbody>
</table>

$\Delta R^2 = 0.06^* \quad 0.14^{**}$

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

### Discussion

The results of Study 1 showed that among Black Americans, perceiving the ingroup as prototypical of the ‘disadvantaged group’ category in America was positively associated with support for and willingness to engage in collective action on behalf of the Black Lives Matter movement when prototypicality scores were measured using the Venn diagram scores, but not when using the trait-rating scores. Regression results also showed that Black American
prototypicality was a positive predictor of willingness to engage in collective action on behalf of BLM (but not support). The Venn diagram results from Study 1 suggest that, as expected, Black Americans may be willing to engage in collective action for the ingroup to the extent that they see their group as prototypical of ‘disadvantaged groups in America’ (i.e., the extent to which they engage in ingroup projection).

Study 1 results also suggest that outgroup projection is associated with support and willingness to engage in collective action for the associated target outgroup. For example, outgroup projection of Asian Americans onto ‘disadvantaged groups in America’ was positively associated with support and willingness to engage in collective action for Stop Asian Hate. Additionally, outgroup projection of Latino/Hispanic Americans was positively associated with support and collective action for the Dreamers Movement when ingroup projection was measured with both the trait-rating task and the Venn-diagrams. Further, when ingroup projection was measured using the trait-rating task, Black Americans were willing to engage in collective action for Stop Asian Hate to the extent that they saw Asian Americans as prototypical of ‘disadvantaged groups in America’. These results, however, did not hold true for Latino/Hispanic American prototypicality. When ingroup projection was measured using the Venn-diagrams, Black Americans were willing to engage in collective action for Asian Americans to the extent that they saw them as prototypical of ‘disadvantaged groups in America’. Additionally, Black Americans were willing to support Latino/Hispanic Americans to the extent that they saw Latino/Hispanic Americans as prototypical of ‘disadvantaged groups in America’. Although the results of this study were varied, they suggest that collective action support may be dependent on projection, whether it is ingroup or allyship based.
I expected that Black Americans who saw their ingroup as prototypical of the ‘disadvantaged groups in America’ category would be less likely to support and engage in collective action for the target outgroups and their social movements. This hypothesis was not supported in the current study. Ingroup projection by Black Americans was not associated with support or willingness to engage in collective action for Asian Americans or Latino/Hispanic Americans when either the trait-rating task or Venn-diagrams were used to measure ingroup projection. A potential reason for this is that effects may have been driven by perceptions or biases towards particular social movements (Stop Asian Hate and the Dreamers Movement in this study). For example, although participants may have been willing to support and engage in collective action for their ingroup as well as other disadvantaged groups, it is possible that they may not agree with the tactics that are used in particular social movements, such as aggressive protesting or vandalism, leading to a lack of support and willingness to engage in collective action for the social movement (see Avery et al., 2018). It is possible that in Study 1, some Black Americans were willing to engage in collective action for Asian Americans and/or Latino/Hispanic Americans, but did not agree with the tactics or values of the Stop Asian Hate Movement and/or the Dreamers Movement.

Further, an additional goal of the current study was to determine a method of measuring ingroup projection that is effective and intuitive for participants. Although both the trait-rating measure and Venn diagram measure have been used to measure ingroup projection in other studies (e.g., Waldzus et al., 2004; Waldzus & Mummendey, 2004), the Venn-diagram measure may have been more comprehensible for participants. This is evidenced by the fact that 197 participants successfully completed the Venn diagram, but only 171 (26 less) correctly completed the trait rating task (i.e., participants needed to be removed for either skipping the
trait-rating task or misunderstanding it). This potential lack of comprehension may have undermined its utility to assess ingroup projection, and may have partially accounted for the varying results.

In Study 2, I wanted to further investigate the association between ingroup projection and willingness to engage in collective action for the ingroup and outgroup, while addressing the possible reasons for the varied results. Most importantly, I assessed a factor that may decrease or eliminate the extent to which participants believe that disadvantaged outgroups are prototypical of the disadvantaged group category, and thus downstream allyship: Competitive victimhood.

**Study 2**

The purpose of Study 2 was to further investigate the possible association between ingroup projection and inter-disadvantaged group allyship. To this end, I once again assessed the extent to which Black Americans projected onto the ‘disadvantaged groups in America’ category, but also made the following changes. First, I assessed competitive victimhood as a possible moderator of the ingroup projection effect. Specifically, along with Hypotheses 1, 2, and 3 from Study 1, I hypothesized that (H4) Black Americans who projected onto the ‘disadvantaged groups in America’ category would be less willing to engage in collective action for other disadvantaged groups if they feel like they are competing for the victim status with them (i.e., competitive victimhood; see Young & Sullivan, 2016). Previous research has shown that ingroup projection results in negative attitudes toward outgroups (e.g., Wenzel, 2008). However, Study 1 results showed that Black Americans who perceived their group to be prototypical of ‘disadvantaged groups in America’ did not show a lack of support and willingness to engage in collective action on behalf of the two outgroups. This may have been because of a lack of competitive victimhood, as Black Americans who saw their group as
prototypical of the disadvantaged category may not have prioritized competing for the victim status with other disadvantaged groups, causing the lack of negative associations between ingroup projection and outgroup support.

Competitive victimhood typically leads to a perceived hierarchy and a sense of competition between groups (see Young et al., 2016 for a review). Among other outcomes, competitive victimhood predicts animosity between groups (Cichocka et al., 2020), negative outgroup attitudes (Demirdag & Hasta, 2019), and undermines allyship (Nadler & Shnabel, 2006). Reduced competitive victimhood, therefore, can lead to positive outgroup attitudes (Shnabel et al., 2013). In Study 2, Black Americans who project onto the disadvantaged category and engage in competitive victimhood may be less willing to engage in collective action for the outgroups. I expected to see this dampening effect, in which high levels of competitive victimhood with outgroups would undermine the allyship between Black Americans and the outgroups seen in Study 1.

A second difference between Studies 1 and 2 is that I revised the collective action support scale to focus on support for the target disadvantaged groups themselves, rather than on particular social movements associated with each subgroup. This change was made to address the possibility of biases towards particular social movements. Specifically, as previously noted, participants may want to ally with a particular fellow disadvantaged group but not with a particular social movement of that disadvantaged group. For instance, Black Americans may be inclined to support the advancement of Latino/Hispanic Americans but for one reason or another do not support the Dreamers Movement. Additionally, to further assess support, I included a resource allocation task in which participants were asked whether they would donate funds to one of the three target groups used in the current study.
A third change made for Study 2 was in terms of the target outgroups. Specifically, I removed Asian Americans as a target outgroup. I did so, in part, because research has shown that discrimination against Asian Americans is qualitatively different from discrimination against Latino/Hispanic Americans or Black Americans (see Avery, 2018). Although Asian Americans do experience racism (Jun & Wu, 2021), they are also often viewed as the ‘model minority’ in America, a group that has succeeded through hard work and intelligence (Kawai, 2005). This means that Asian Americans are perceived differently than other disadvantaged groups, and this lack of similarity may help to explain why ingroup projection among Black Americans was not associated with support for Asian Americans or willingness to engage in collective action on behalf of Stop Asian Hate, as Black Americans may not perceive Asian Americans to be in as much need of support as other disadvantaged groups (e.g., Latino/Hispanic Americans), and may be more willing to help those groups instead. Thus, in Study 2, I replaced Asian Americans as one of the two target disadvantaged outgroups with Native Americans—a group that, like Latino/Hispanic Americans, has faced discrimination in the U.S. without the ‘model minority’ title (see Andrade et al., 2021; Findling et al., 2019).

Lastly, to assess projection, I only used the Venn diagram measure. This decision was made because it was more intuitive for participants than the trait-based measure.

Method

Participants and Procedure

An a priori power analysis was conducted using G*power (Faul et al., 2009) to determine the sample size required to test the relation between ingroup projection, support, and willingness to engage in collective action using a multiple regression analysis with four variables. It indicated that to detect a small effect with 90% power and \( \alpha = .05 \), a sample of \( N = 265 \) was
needed. I also included an additional 20% (53 participants) to account for potential exclusions due to poor data quality. A total of 318 Black Americans accessed the study from the British online research platform, Prolific (www.prolific.co/). Of these, nine participants were excluded for not identifying as Black American, and four participants were excluded because they said they did not respond honestly. The final sample consisted of 306 participants (147 females, 155 males, 3 non-binary individuals, and 1 transgender individual). Participants’ ages ranged from 18 to 76 years ($M = 38.07$, $SD = 12.93$).

Recruitment for Study 2 followed the same procedure as Study 1, but there were some notable changes in the study design. First, I added a five-item measure of competitive victimhood to assess the extent to which competitive victimhood moderates the relation between ingroup projection and willingness to engage in collective action. I also included a revised measure of willingness to engage in collective action on behalf of the ingroup and the two outgroups that focused more on advancing the target disadvantaged groups themselves rather than their respective social movements. A resource allocation measure was also added to further assess collective action willingness. Lastly, all items using Asian Americans as an outgroup were replaced with items about Native Americans.

Participants who consented to the study were directed to a questionnaire that contained eligibility items. Those who were not eligible (i.e., potential participants who were not American citizens, did not reside in the US, did not identify as Black Americans), were re-directed to an Ineligibility Debriefing and were not permitted to complete the survey. The survey, hosted on Qualtrics, was similar to that in Study 1, but the ingroup projection trait-rating task was removed to ensure that participants could intuitively express the extent to which they engage in ingroup projection by simply using the Venn diagram task.
Measures

Participants completed the following measures:

**Ingroup Projection (Venn Diagrams).** Akin to Study 1, participants were presented with a series of seven Venn diagrams adapted from Aron et al. (1991) with a subgroup (e.g., Latino/Hispanic Americans) in the first circle, and the superordinate group (disadvantaged groups in America) in the second circle. The first Venn diagram presented the two circles as separate, with each following diagram presenting the circles closer together, leading to the seventh diagram showing the circles as completely overlapping. The participants were asked to indicate how typical each of the three subgroups of interest (Black Americans, Latino/Hispanic Americans, and Native Americans) are of ‘disadvantaged groups in America’ in general by choosing one of the seven diagrams.

**Competitive Victimhood.** Competitive victimhood among Black Americans was examined using a measure adapted from the Kahalon et al., (2019) five-item Competitive Victimhood Scale. Items were: “Black Americans have obviously suffered greater harm than Latino/Hispanic Americans”, “Black Americans suffered greater injustices than Latino/Hispanic Americans”, “It is very important for me that people would recognize that Black Americans have undergone greater suffering than Latino/Hispanic Americans”, “I want others to realize that the injustices that Black Americans suffer are much graver than those that Latino/Hispanic Americans suffer”, and “People must know that Black Americans are the real victims in America”. Each item was anchored at 1 (strongly disagree) to 7 (strongly agree), and this measure was then repeated, replacing Latino/Hispanic Americans with Native Americans ($\alpha = .91$ [Latino/Hispanic Americans]; $\alpha = .95$ [Native Americans]).
**Collective Action Support Intentions.** Willingness to engage in collective action on behalf of Latino/Hispanic Americans, Native Americans, and Black Americans was measured using four items each, adapted from Stefaniak et al. (2020). Items include “I would take part in a protest against racism towards [target disadvantaged group]”, “I would donate money to a political candidate who proposes pro-[target disadvantaged group] policies”, “I would volunteer my time to organize a march in support of [target disadvantaged group] rights”, and “I would share a story on my social media (e.g., Facebook, Twitter) that condemns racism against [target disadvantaged group]”. Each item was anchored at 1 (*strongly disagree*) and 7 (*strongly agree*). Participants’ scores were calculated by obtaining the mean of the four items with higher scores indicating more willingness to engage in collective action on behalf of the groups ($\alpha = .86$ [Black Americans]; $\alpha = .90$ [Latino/Hispanic Americans]; $\alpha = .89$ [Native Americans]).

**Resource Allocation.** The extent to which Black Americans in this study were willing to share resources with both Latino/Hispanic Americans and Native Americans was examined through a hypothetical resource allocation task. Participants were asked: “Imagine that the research team provided you with $12 to donate to the following causes, how would you allocate that $12?” They were then provided with three choices: 1) a cause that supports the rights of Latino/Hispanic Americans; 2) a cause that supports the rights of Native Americans and 3) a cause that supports the rights of Black Americans. Participants were able to allocate the entire $12 USD (a denomination that can be split equally into three parts if needed) to one cause or split it however they want among two or three of the causes.
Results

Preliminary Analyses

To determine whether Black Americans engaged in ingroup projection (i.e., perceiving Black Americans to be more prototypical of the superordinate ‘disadvantaged groups in America’ category than both Latino/Hispanic Americans and Native Americans), a repeated measures one-way ANOVA was conducted with projection (of Black Americans, Latino/Hispanic Americans, and Native Americans) onto the ‘disadvantaged groups in America’ category as the within-participants factor. There was a significant projection effect for three groups, $F(2, 304) = 67.66, p < .001, \eta^2 = .31$. Pairwise comparisons indicated that projection into the ‘disadvantaged groups in America’ category was significantly higher for Black Americans ($M=5.35; SD=1.61$) than Latino/Hispanic Americans ($M=4.29; SD=1.56$), $p < .001$, higher for Black Americans than Native Americans ($M=4.91; SD=1.86$), $p < .001$, and higher for Native Americans than Latino/Hispanic Americans, $p < .001$. To the point, Black Americans perceived their group to be more prototypical of the disadvantaged group category than the target outgroups. Descriptive statistics associated with projection scores of the three groups are reported in Table 9.

Correlational Analyses

Perceiving Black Americans as prototypical of the superordinate disadvantaged group category was positively correlated with willingness to engage in collective action on behalf the ingroup (i.e., Black Americans) and target outgroups (i.e., Latino/Hispanic and Native Americans), and negatively correlated with resource allocation for Latino/Hispanic Americans. Perceiving Latino/Hispanic Americans as prototypical of the superordinate category was positively correlated with willingness to engage in collective action on behalf of all three target
disadvantaged groups, and negatively correlated with resource allocation for Black Americans only. Perceiving Native Americans as prototypical of the superordinate group was positively correlated with willingness to engage in collective action for all three target disadvantaged groups, and negatively correlated with resource allocation for Black Americans.

Furthermore, competitive victimhood with Latino/Hispanic Americans was positively correlated with Black American projection and negatively correlated with both Latino/Hispanic American projection and Native American projection. Competitive victimhood with Latino/Hispanic Americans was also positively correlated with willingness to engage in collective action on behalf of Black Americans, and negatively correlated with willingness to engage in collective action on behalf of Latino/Hispanic Americans. Lastly, competitive victimhood with Latino/Hispanic Americans was positively correlated with resource allocation for Black Americans and negatively correlated with resource allocation for both Latino/Hispanic Americans and Native Americans.

Competitive victimhood with Native Americans was negatively correlated with both Native American projection and Latino/Hispanic American projection. Competitive victimhood with Native Americans was positively correlated with willingness to engage in collective action on behalf of Black Americans, as well as resource allocation for Black Americans. Lastly, competitive victimhood with Native Americans was also negatively correlated with resource allocation for Native Americans and Latino/Hispanic Americans.
Table 6. Means, standard deviations, and correlations between variables in Study 2

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black American projection</td>
<td>5.35 (1.61)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Latino/Hispanic American projection</td>
<td>4.29 (1.56)</td>
<td>.489**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Native American projection</td>
<td>4.91 (1.86)</td>
<td></td>
<td>.510**</td>
<td>.553**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Competitive Victimhood with Latino/Hispanic Americans</td>
<td>4.87 (1.37)</td>
<td></td>
<td></td>
<td>.165**</td>
<td>-.198**</td>
<td>-.139*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Competitive Victimhood with Native Americans</td>
<td>4.05 (1.51)</td>
<td></td>
<td></td>
<td></td>
<td>-.194**</td>
<td>-.373**</td>
<td>.702**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Collective Action on behalf of Black Americans</td>
<td>4.79 (1.61)</td>
<td></td>
<td></td>
<td>.273**</td>
<td>.204**</td>
<td>.160**</td>
<td>.158**</td>
<td>.143*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Collective Action on behalf of Latino/Hispanic Americans</td>
<td>3.93 (1.73)</td>
<td></td>
<td></td>
<td>.179**</td>
<td>.343**</td>
<td>.236**</td>
<td>-.124*</td>
<td>-.015</td>
<td>.760**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Collective Action on behalf of Native Americans</td>
<td>4.16 (1.73)</td>
<td></td>
<td></td>
<td>.246**</td>
<td>.261**</td>
<td>.353**</td>
<td>-.028</td>
<td>-.053</td>
<td>.805**</td>
<td>.876**</td>
<td></td>
</tr>
<tr>
<td>9. Resource Allocation for Black Americans</td>
<td>6.62 (5.46)</td>
<td></td>
<td></td>
<td>-.112*</td>
<td>-.203**</td>
<td>.226**</td>
<td>.230**</td>
<td>.015</td>
<td>-.159**</td>
<td>-.099</td>
<td></td>
</tr>
<tr>
<td>10. Resource Allocation for Latino/Hispanic Americans</td>
<td>2.60 (2.56)</td>
<td></td>
<td></td>
<td>.105</td>
<td>-.028</td>
<td>-.244**</td>
<td>-.135*</td>
<td>.021</td>
<td>.168**</td>
<td>.079</td>
<td>.179**</td>
</tr>
<tr>
<td>11. Resource Allocation for Native Americans</td>
<td>3.35 (3.18)</td>
<td></td>
<td></td>
<td>-.052</td>
<td>.003</td>
<td>.046</td>
<td>-.112*</td>
<td>-.178**</td>
<td>-.015</td>
<td>.021</td>
<td>.093</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .001
Moderation Analyses

To examine the relations among ingroup projection, competitive victimhood with the target outgroups, and both willingness to engage in collective action on behalf of the outgroups as well as resource allocation for the outgroups, a series of moderation analyses were conducted. In these analyses, competitive victimhood between the ingroup and a relevant outgroup (Latino/Hispanic or Native Americans) was entered as a moderator of the relation between ingroup projection and collective action on behalf of the relevant outgroup. These analyses were conducted separately for the two outgroups and repeated replacing collective action support with resource allocation for the outgroup as the dependent variable.

In the model with competitive victimhood with Latino/Hispanic Americans as the moderator and collective action for Latino/Hispanic Americans as the dependent variable, the main effect of ingroup projection ($\beta = .21$, 95% C.I. (0.10, 0.33), $p < .001$), and the main effect of competition ($\beta = -.16$, % C.I (-.30, -.02), $p = .03$) were significant. Importantly, a significant interaction between ingroup projection and competition qualified the main effects, $\beta = -.11$, 95% C.I. (-.19, -.027), $p = .010$ (see Figure 1). When competitive victimhood with Latino/Hispanic Americans was at -1 SD below the mean ($\beta = .36$, 95% C.I. (.20, .52), $p < .001$), the effect of ingroup projection on collective action for Latino/Hispanic Americans was significant. It was not significant, however, at high levels (+1SD) of competitive victimhood between Black and Latino/Hispanic Americans, $\beta = .062$, 95% C.I. (-.11, .23), $p = .47$. 
In the model with competitive victimhood with Latino/Hispanic Americans as the moderator, and resource allocation for Latino/Hispanic Americans as the dependent variable, the main effect of ingroup projection was not significant ($\beta = -.15$, 95% C.I. (-.33, .02), $p = .08$), and the main effect of competitive victimhood was significant ($\beta = -.42$, 95% C.I. (-.63, -.21), $p < .001$). The interaction between ingroup projection and competitive victimhood was also not significant ($\beta = .016$, 95% C.I. (-.11, .14), $p = .80$).
In the model with competitive victimhood with Native Americans as the moderator, and collective action for Native Americans as the dependent variable, the main effect of ingroup projection was significant ($\beta = .28$, 95% C.I. (.16, .40), $p < .001$), but the main effect of competitive victimhood was not significant ($\beta = -.05$, 95% C.I. (.18, .08), $p = .43$). The interaction between ingroup projection and competitive victimhood was also not significant ($\beta = -.043$, 95% C.I. (-.12, .036), $p = .29$).

Finally, in the model with competitive victimhood with Native Americans as the moderator and resource allocation for Native Americans as the dependent variable, the main effect of ingroup projection was not significant ($\beta = -.10$, 95% C.I. (-.32, .12), $p = .36$) and the main effect of competitive victimhood was significant ($\beta = -.39$, 95% C.I. (-.63, -.16), $p = .001$). The interaction between ingroup projection and competition was not significant ($\beta = .07$, 95% C.I. (-.08, .22), $p = .36$).

**Multiple Regression**

To further examine the relations among ingroup projection, willingness to engage in collective action on behalf of the ingroup and outgroup, resource allocation for the ingroup and outgroup, and competitive victimhood with the outgroups, a series of multiple regression analyses were conducted. For these analyses, I used the Venn-diagram projection scores as well as competitive victimhood between the ingroup and outgroups as predictors of willingness to engage in collective action on behalf of the ingroup and outgroups as well as resource allocation for the ingroup and outgroups (as separate outcome variables).

The results show that in the model with willingness to engage in collective action on behalf of Black Americans as the dependent variable, projection of all three target disadvantaged groups together and victimhood competition with both outgroups accounted for 9.8% of the
variance in willingness to engage in collective action on behalf of Black Americans, $F(5, 300) = 7.64, p < .001$. Black American projection was the only significant positive predictor ($\beta = .164, t = 2.35, p = .020$).

In the model with resource allocation for Black Americans as the dependent variable, projection of all three target disadvantaged groups together and victimhood competition with both outgroups accounted for 8.2% of the variance in resource allocation for Black Americans, $F(5, 300) = 6.47, p < .001$. Black American projection was a significant positive predictor ($\beta = .154, t = 2.17, p = .031$), while Native American projection was a significant negative predictor ($\beta = -.234, t = -3.05, p = .003$). See Table 10 for the multiple regression results when ingroup projection of all three groups as well as competitive victimhood with the outgroups are used as the predictor variables, and collective action support, as well as resource allocation for Black Americans are used as separate outcome variables.

### Table 10. Projection of target disadvantaged groups as well as competitive victimhood between the ingroup and outgroup as predictors of collective action support for Black Americans and Resource Allocation for Black Americans as separate outcome variables.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Collective Action for Black Americans</th>
<th></th>
<th>Resource Allocation for Black Americans</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
<td>$B$</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>0.17</td>
<td>0.07</td>
<td>.16*</td>
<td>0.52</td>
</tr>
<tr>
<td>Latino/Hispanic American Projection</td>
<td>0.13</td>
<td>0.07</td>
<td>.13</td>
<td>-0.80</td>
</tr>
<tr>
<td>Native American Projection</td>
<td>0.06</td>
<td>0.07</td>
<td>.07</td>
<td>-0.69</td>
</tr>
<tr>
<td>Competitive Victimhood with Latino/Hispanic Americans</td>
<td>0.07</td>
<td>0.10</td>
<td>.06</td>
<td>0.53</td>
</tr>
<tr>
<td>Competitive Victimhood with Native Americans</td>
<td>0.16</td>
<td>0.10</td>
<td>.15</td>
<td>0.16</td>
</tr>
</tbody>
</table>

$\Delta R^2$ 0.11** 0.10**

*Note.* *p* < .05, **p* < .001
In the model with willingness to engage in collective action on behalf of Latino/Hispanic Americans, projection of all three target disadvantaged groups together and competitive victimhood with both outgroups accounted for 13.6% of the variance in willingness to engage in collective action for Latino/Hispanic Americans, $F(5, 300) = 10.62, p < .001$. Perceiving Latino/Hispanic Americans ($\beta = .257, t = 3.68, p < .001$) as well as Native Americans ($\beta = .148, t = 1.99, p = .048$) as prototypical of the superordinate group were significant positive predictors. Competitive victimhood with Latino/Hispanic Americans ($\beta = -.232, t = -2.899, p = .004$) was also a significant negative predictor, and competitive victimhood with Native Americans ($\beta = .253, t = 3.072, p = .002$) was a significant positive predictor.

In the model with resource allocation for Latino/Hispanic Americans as the dependent variable, projection of all three target disadvantaged groups together and competitive victimhood with both outgroups accounted for 7.5% of the variance in resource allocation for Latino/Hispanic Americans, $F(5, 299) = 5.95, p < .001$. Latino/Hispanic projection was a significant positive predictor ($\beta = .18, t = 2.55, p = .011$), while Black American projection was a significant negative predictor ($\beta = -.16, t = -2.20, p = .029$). Competitive victimhood with Latino/Hispanic Americans was also a significant negative predictor ($\beta = -.207, t = -2.49, p = .013$). See Table 11 for the multiple regression results when projection of all three target disadvantaged groups as well as competitive victimhood with the outgroups are used as the predictor variables, and collective action support, as well as resource allocation for Latino/Hispanic Americans are used as separate outcome variables.
Table 11. Projection for target disadvantaged groups as well as competitive victimhood between the ingroup and outgroup as predictors of collective action support for Latino/Hispanic Americans and Resource Allocation for Latino/Hispanic Americans as separate outcome variables.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Collective Action for Latino/Hispanic Americans</th>
<th>Resource Allocation for Latino/Hispanic Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Black American Projection</td>
<td>0.02</td>
<td>0.07</td>
</tr>
<tr>
<td>Latino/Hispanic American Projection</td>
<td>0.28</td>
<td>0.08</td>
</tr>
<tr>
<td>Native American Projection</td>
<td>0.14</td>
<td>0.07</td>
</tr>
<tr>
<td>Competitive Victimhood with Latino/Hispanic Americans</td>
<td>-0.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Competitive Victimhood with Native Americans</td>
<td>0.29</td>
<td>0.09</td>
</tr>
</tbody>
</table>

$\Delta R^2$ 0.15** 0.09**

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

In the model with willingness to engage in collective action for Native Americans as the dependent variable, projection of all three target disadvantaged groups together and competitive victimhood with both outgroups accounted for 12.7% of the variance in willingness to engage in collective action for Native Americans, $F (5, 300) = 9.86, p < .001$. Native American projection was the only significant positive predictor ($\beta = .336, t = 4.35, p < .001$).

In the model with resource allocation for Native Americans as the dependent variable, projection of all three target disadvantaged groups together and victimhood competition with both outgroups accounted for 1.9% of the variance in resource allocation for Native Americans, $F (5, 299) = 2.18, p = .056$. Although this model was not significant, competitive victimhood with Native Americans was a significant negative predictor ($\beta = -.205, t = -2.33, p = .021$). See Table 12 for the multiple regression results when projection of all three target disadvantaged groups as well as competitive victimhood with the outgroups are used as the predictor variables.
and collective action support, as well as resource allocation for Native Americans are used as separate outcome variables.

**Table.** *Projection of target disadvantaged groups as well as competitive victimhood between the ingroup and outgroup as predictors of collective action support for Native Americans and Resource Allocation for Native Americans as separate outcome variables.*

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Collective Action for Native Americans</th>
<th>Resource Allocation for Native Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>B</em></td>
<td><em>SE</em></td>
</tr>
<tr>
<td>Black American Projection</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>Latino/Hispanic American Projection</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>Native American Projection</td>
<td>0.30</td>
<td>0.07</td>
</tr>
<tr>
<td>Competitive Victimhood with Latino/Hispanic Americans</td>
<td>-0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Competitive Victimhood with Native Americans</td>
<td>0.15</td>
<td>0.09</td>
</tr>
<tr>
<td>Δ<em>R</em>²</td>
<td>0.15**</td>
<td></td>
</tr>
</tbody>
</table>

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

**Discussion**

The results of Study 2 support my general hypothesis that ingroup projection is positively associated with collective action for the ingroup and outgroup projection is positively associated with collective action for the outgroup. Similar results supporting my hypotheses were also seen using a series of multiple regression analyses, in which ingroup prototypicality was a significant predictor of willingness to engage in collective action for the ingroup, outgroup prototypicality was a significant predictor of willingness to engage in collective action for the outgroup, while competition with the outgroup was a negative predictor of willingness to engage in collective action for outgroups.

Akin to Study 1, ingroup projection was also associated with collective action intentions toward both target disadvantaged outgroups (i.e., Latino/Hispanic Americans and Native
Americans). However, like in Study 1, ingroup projection did not predict collective action support for the target outgroups. Thus, Study 2 results mimicked Study 1 results, despite the addition of a new disadvantaged outgroup (Native Americans as opposed to Asian Americans), an additional resource allocation scale, and an updated collective action willingness scale focused on the target disadvantaged groups themselves rather than the collective action support of specific social movements.

Recently, Kahalon et al. (2019) found that ingroup projection among minority group members was associated with negative attitudes towards other minority outgroups. In their study, however, the superordinate group was the participant’s national identity (Dutch), the dominant and advantaged group in the Netherlands (contrary to the current research in which the superordinate group is the disadvantaged groups in America category). Based on the results of Study 2 (and Study 1), ingroup projection within disadvantaged groups appears to operate differently when the superordinate category is ‘disadvantaged groups in America’, rather than a superordinate category dominated by the advantaged group. Specifically, ingroup projection appears to increase willingness to engage in collective action on behalf of the ingroup as well as the disadvantaged outgroups. These results could be due to Black Americans perceiving a sense of shared discrimination with other disadvantaged groups in need. Cortland et. al (2017), for example, found that among minority group members, perceiving shared experiences of discrimination improved inter-minority outcomes. It is possible that Black Americans in this study who projected onto the disadvantaged category also perceived the target outgroups as similarly disadvantaged, leading to a willingness to engage in collective action for them. In Study 2 of my research, however, this effect is qualified by perceived competitive victimhood with Latino/Hispanic Americans.
Black Americans who perceived their group as prototypical of ‘disadvantaged groups in America’ were only willing to engage in collective action for Latino/Hispanic Americans at low and moderate levels of competition. The relationship between ingroup projection and willingness to engage in collective action for Latino/Hispanic Americans was absent when perceived competition was high. It is known in the literature that competitive victimhood undermines allyship (e.g., Demirdag & Hasta, 2019, Nadler & Shnabel, 2006) and that reducing competitive victimhood among groups leads to positive outgroup attitudes (Shnabel et al., 2013). Most of this research, however, has been done with advantaged group members. The results of this study suggest that competitive victimhood also undermines inter-disadvantaged group allyship, as among Black Americans, inter-disadvantaged group allyship was the product of ingroup projection in the absence of competitive victimhood with the target outgroup.

**General Discussion**

The purpose of the current research was to explore and better understand allyship between disadvantaged groups. Specifically, I wanted to assess the conditions under which disadvantaged groups members support other disadvantaged groups. I did so through the lens of ingroup projection. Although the literature on allyship is growing (e.g., Gates et al., 2021; Wellman, 2022), there is a significant gap in the literature on allyship between disadvantaged groups, and even less is known about the processes of ingroup and outgroup projection among disadvantaged groups. Across two studies, I tested the idea that allyship between disadvantaged groups is a product of the extent to which disadvantaged groups engage in ingroup and outgroup projection.

First, I wanted to test whether members of disadvantaged groups (here: Black Americans) engaged in ingroup projection. That is, I wanted to assess whether they perceived their ingroup
as more prototypical of the ‘disadvantaged groups in America’ category than two target disadvantaged outgroups. In both Studies 1 and 2, it was found that Black Americans did engage in ingroup projection. They perceived their ingroup as more prototypical of the ‘disadvantaged groups in America’ category than both Asian Americans and Latino/Hispanic Americans (in Study 1), as well as both Latino/Hispanic Americans and Native Americans (in Study 2). This effect was seen when both the trait-rating task and Venn-diagram task were used to measure ingroup projection.

My general hypothesis in both studies was that members of disadvantaged groups’ support for their own group as well as support for other disadvantaged groups is a function of the extent to which they engage in ingroup and outgroup projection. I expected that (H1) to the extent that Black Americans perceived their ingroup as prototypical of the ‘disadvantaged groups in America’ category, they would be relatively more supportive and more willing to engage in collective action in support of the ingroup. In Studies 1 and 2, this hypothesis was supported, however, these results were only seen when the more intuitive Venn-diagram task was used to measure ingroup projection and not when a trait rating task was used. I also expected that (H3) to the extent that Black Americans perceived a target outgroup to be prototypical of the ‘disadvantaged groups in America’ category, they would be more likely to support and willing to engage in collective action for said outgroup. This hypothesis was supported in both Studies 1 and 2. Last, I hypothesized that (H2) to the extent that Black Americans perceived their ingroup as prototypical of the ‘disadvantaged groups in America’ category, there would be less support for two disadvantaged outgroups. Contrary to this prediction, in Studies 1 and 2, ingroup projection among Black Americans was not associated with support or collective action support for the target outgroups.
In Study 2, I attempted to replicate and extend the results of Study 1, while also examining whether competitive victimhood among Black Americans moderated the effect (or lack of effect) that projection had on willingness to engage in collective action for the target disadvantaged outgroups. Competitive victimhood has been shown to undermine allyship (e.g., Nadler & Shnabel, 2006). Based on this, one possible reason why ingroup projection among Black Americans in Study 1 did not negatively relate to willingness to engage in collective action on behalf of the disadvantaged outgroups was because they did not experience a sense of competition for the victim status with the outgroups. Therefore, in Study 2, I included a measure of competitive victimhood and expected that Black Americans who perceived their group as prototypical of the 'disadvantaged groups in America' category would be less willing to engage in collective action on behalf of a target outgroup if they engaged in competitive victimhood with said outgroup.

A series of moderation analyses showed that Black Americans who engaged in ingroup projection were more willing to engage in collective action on behalf of Latino/Hispanic Americans when victimhood competition with Latino/Hispanic Americans was low and moderate, but not high. Therefore, consistent with the literature (e.g., Demirdag & Hasta, 2019), competitive victimhood undermined allyship in this study. I also ran this model with collective action for the other target disadvantaged outgroup, Native Americans, as the dependent variable. In this model, the interaction between ingroup projection and competitive victimhood between Black Americans and Native Americans, was not significant.

In sum, the two studies have generally supported my main hypothesis that inter-disadvantaged group allyship is a function of ingroup projection onto the ‘disadvantaged groups in America’ category. As expected, ingroup projection was positively associated with ingroup
collective action support, and outgroup projection was positively associated with outgroup collective action support. Contrary to my prediction, however, ingroup projection among Black Americans was not negatively associated with collective action support for disadvantaged outgroups. Study 2 results suggested, however, that this may be due to a lack of competitive victimhood between Black Americans and the target outgroups.

**Implications**

Although the literature on allyship is growing (e.g. Gates et al., 2021; Wellman, 2022), the literature on allyship among disadvantaged groups is limited, and research on ingroup projection within disadvantaged groups is very scarce. The current research has implications for the allyship literature by suggesting that ingroup projection is an important factor in determining whether disadvantaged group members will engage in collective action for other disadvantaged groups. Despite the importance of active allyship between disadvantaged social groups (Jones et al., 2021), the literature on collective action largely focuses on when advantaged group members will support disadvantaged groups (e.g., Robinson, 2022; Selvanathan et al., 2018). The current research, therefore, contributes to the knowledge we have on allyship among disadvantaged groups.

This research also suggests that competitive victimhood moderates the relationship between ingroup projection onto the ‘disadvantaged group’ category and collective action for a target disadvantaged outgroup. One possible explanation is that individuals who perceive high levels of competitive victimhood tend to view social relationships as zero-sum games, where one group's gains are seen as the other group's losses. In this mindset, projecting their own group identity onto a ‘disadvantaged group’ category may be associated with an exacerbated perception of disadvantaged outgroups as threats to their ingroup’s resources or status. As a result, they may
be less inclined to support collective action that involves cooperation with the target outgroup, even if they share similar disadvantages. On the other hand, when individuals perceive low levels of competitive victimhood, they are less likely to view intergroup relationships as competitive. They may be more open to recognizing the common challenges and experiences shared with the target outgroup. In this case, projecting their ingroup identity onto the disadvantaged group category can foster a sense of empathy, solidarity, and collective identity, increasing their willingness to engage in collective action towards the target outgroup. Additionally, individuals with low levels of competitive victimhood may perceive collective action as an effective strategy for addressing shared disadvantages and promoting social change. They may believe that by joining forces with the target outgroup, they can amplify their collective voice and create a stronger impact in challenging the systemic inequalities and injustices they face.

Importantly, the findings of my research, which expand on the existing ingroup projection model (Wenzel, 2008), have significant implications for understanding the dynamics of group identity and intergroup relations. Previous studies on the ingroup projection model have primarily focused on projection into a dominant or advantaged group. However, my research sheds light on an important and previously unexplored aspect of ingroup projection by demonstrating that members of disadvantaged groups also engage in projection, specifically projecting their group identity onto a superordinate ‘disadvantaged group in America’ category. This finding challenges the assumption that only members of dominant groups project their identity onto superordinate categories and highlights the complexity of identity dynamics within disadvantaged groups. By recognizing this phenomenon, the ingroup projection model can be refined to incorporate the experiences and behaviors of disadvantaged group members, contributing to a more comprehensive understanding of intergroup relations. This has
implications for interventions and policies aimed at promoting inclusivity and reducing intergroup biases, as it emphasizes the need to consider the multifaceted nature of identity projection among both advantaged and disadvantaged groups.

Indeed, this research has important practical implications. First, policies or interventions that are aimed at improving intergroup relations and preventing conflict should consider the potential importance of factors such as ingroup projection and competitive victimhood in allyship among disadvantaged groups in America. For example, interventions could focus on the disadvantages shared between minority groups, possibly increasing the potential for ingroup and outgroup collective action support while fostering a sense of shared identity rather than competitive victimhood. Second, this research may have implications for media representation of disadvantaged groups in America. Accurately portraying the disadvantages that different racial minority groups in the U.S. face, along with encouraging a sense of shared identity rather than competition for the victim status, may contribute to greater allyship among disadvantaged groups.

Limitations and Future Directions

Some limitations of the current studies should be noted. First, due to design choices and several participants misunderstanding the trait-rating task, the sample size of Study 1 ($N = 171$) was smaller than what would have been optimal. Further, it is possible that the use of MTurk in Study 1 resulted in poor data quality, as MTurk data quality has significantly decreased in the past few years, partly due to participants using Virtual Private Servers to complete surveys multiple times (VPS; Kennedy et al., 2020). Both of these issues were resolved in Study 2 by only measuring ingroup projection using the more intuitive Venn-diagram measure, and recruiting $N = 306$ participants from the British platform, Prolific, a platform that Eyal et al.
(2021) has found to provide high quality data in regards to comprehension, attention, and honesty in behavioural research.

Further, both studies recruited participants from the U.S. Although the results provide converging evidence on the role of ingroup projection in inter-disadvantaged group attitudes and behavioral intentions, the findings should be replicated in other context to ensure their generalizability. Johnson & Lichter (2010), for example, found that America’s rapidly changing ethnic composition has significant implications for intergroup relations. Further, America’s history with racism and slavery affects the country’s patterns of racial inequality (O’Connell, 2012), an issue seen only in select countries. Future research should investigate ingroup projection among disadvantaged group members living in other geographic locations to determine if there are any differences in the extent to which those groups engage in ingroup projection, as well as its association with collective action on behalf of the ingroup and other disadvantaged outgroups. Other than living in U.S., participants of studies 1 and 2 also all identified as Black Americans. It is possible that ingroup projection, as well as its relationship with willingness to engage in pro-ingroup and pro-outgroup collective action, may work differently among other disadvantaged groups in the U.S. Future research should also assess these relations among different disadvantaged groups.

The current research assessed ingroup projection among Black Americans, in which the ingroup and both outgroups were distinguished by their race. However, there are many other dimensions of disadvantages (e.g., sexuality, gender). It is possible that there are differences in ingroup projection among disadvantaged groups whose disadvantages stem from different dimensions. Therefore, future research should explore ingroup projection and willingness to engage in collective action across other dimensions of discrimination.
The methods used in this research also had their limits. Data from participants may have been subjected to social desirability biases (Paulhus & Reid, 1991). That is, participants may have expressed attitudes and beliefs that they thought the researchers wanted to see, rather than their genuine opinions on ingroup and outgroup projection, as well as pro-ingroup and pro-outgroup collective action intentions. Further, results of both Study 1 and 2 were conducted using self-report measures. Specifically, participants were asked the extent to which they would be willing to engage in collective action on behalf of the ingroup and two disadvantaged outgroups using a collective action measure and a resource allocation task. They were not, however, asked to actively engage in collective action. While valid, attitudinal and behavioural intention measure may not be as effective as actual behavioural measures (Stone et al., 1999), such as tasks in which participants can choose to actively engage (or not engage) in collective action on behalf of the ingroup or outgroup. Future research should assess the relation between ingroup projection and collective action intentions using behavioral measures. Last, the current research used a correlational design, which precludes causal inferences. Therefore, future research on inter-disadvantaged group allyship should assess relationships using an experimental design, such as framing the ingroup or a target outgroup as disadvantaged or using experimental methods to determine if competitive victimhood between the ingroup and outgroup can be reduced.

**Conclusion**

The current research on the projection of group identity among disadvantaged group members onto a superordinate ‘disadvantaged groups in America’ category contributes to a more nuanced understanding of the ingroup projection model. By demonstrating that projection is not limited to dominant or advantaged groups, but also occurs within disadvantaged groups, I
highlight the complexity of intergroup dynamics. This finding underscores the importance of acknowledging the diverse ways in which individuals navigate their group identities and perceive intergroup relationships. By incorporating these insights into theoretical models and interventions, we can foster more inclusive and equitable societies. Understanding the projection tendencies within disadvantaged groups can aid in the development of targeted strategies that promote solidarity, empathy, and collective action towards addressing shared challenges and achieving social justice. Ultimately, this research is vital for advancing our knowledge of intergroup dynamics, fostering intergroup harmony, and promoting a more inclusive society for all.
References


https://www.apa.org/monitor/2022/01/numbers-black-lives


https://doi.org/10.1080/152988602760328012


Appendices

Appendix A

A.1 Recruitment Announcement

Announcement for Recruitment (MTurk)

**Title of the study:** Racial issues in America.

**Description:** In this study, we are interested in your opinions about people in various disadvantaged/minority groups in America. We will ask you a number of questions about these groups and social movements that hope to address challenges these groups may be experiencing. Your participation as well as your responses will be strictly confidential. Only researchers associated with the project will know that you participated in the study, and no one will know how you responded to the questions asked.

**Eligibility Requirements**

Eligibility Requirements:
1. Must be at least 18 years of age.
2. Must be an American citizen and reside in the U.S.
3. Must identify as a Black American.

**Risks:** we can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some stress when thinking about some social issues in America. You will also be asked in this study to list traits/qualities of disadvantaged/minority groups in America, which may be an uncomfortable task for some. If you do experience any distress or discomfort, you may wish to contact one of the helplines nearest to your location.

**Duration and compensation:** This study takes approximately 10 minutes, and upon completion, you will receive US $0.70 for your participation.

**Researchers:** This research is being conducted by Taylor McLellan, Dr. Anna Stefaniak, and Dr. Michael J. A. Wohl at Carleton University (Ottawa, ON).

**Ethics:** This study has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance #117554) and is supported by a research grant from the Social Sciences and Humanities Research Council of Canada to Dr. Wohl.
A.2 Consent Form

**Informed Consent**

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent must provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study.

This study has received clearance by the Carleton University Research Ethics Board-B (CUREB-B Clearance # 117554). Ethics expiration date: TBA.

Eligibility: All participants must: 1) Be at least 18 years of age, 2) Be an American citizen, residing in the U.S. 3) identify as Black American.

Please note that you will be assessed on your eligibility to participate immediately following this consent form. Only eligible participants will be permitted to participate in the survey and receive compensation.

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Study title: Racial issues in America.

Research personnel: The following people are involved in this study, and may be contacted at any time if you have questions or concerns:

Taylor McLellan (Principal Investigator; taylormclellan@cmail.carleton.ca)
Dr. Michael Wohl (Supervisor; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).
Dr. Anna Stefaniak (Postdoctoral Researcher; anna.stefaniak@carleton.ca; +1-613-520-2600 ext. 6312).

Concerns: Should you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone: 613-520-2600 ext. 4085 or by email:ethics@carleton.ca). For all other questions about the study, please contact the researchers.

Purpose and Task Requirements: In this study, we are interested in your opinions about people in various disadvantaged/minority groups in America. We will ask you a number of questions about these groups and social movements that hope to address challenges these groups may be experiencing. The study will take approximately 10 minutes to complete.

Benefits/compensation. We are offering eligible participants US $0.70 for participating.

Duration and locale. The survey will be administered online and should take approximately 10 minutes to complete. Be assured that your name will not be associated in any way with the research findings.

Potential risk/discomfort. We can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some stress when thinking about some social issues in America. You will also be asked in this study to list traits/qualities of groups, which
may be an uncomfortable task for some. If you do experience any distress or discomfort, you may wish to contact one of the helplines nearest to your location.

1. Safe Black Space is an organization that offers various services to those of Africa ancestry to address individual and community to cultural and racial trauma: 
   https://www.safeblackspace.org/

2. InnoPsych is an online platform where people of color are able to find and connect with therapists of color to help with their wellness journey using content created by and made for people of color:
   https://www.innopsych.com/

If you feel any discomfort or distress while reading a question in this study, please feel free to leave it blank – no penalty will be incurred.

**Right to Withdraw:** Your participation in this study is entirely voluntary. At any point during the study, you have the right not to complete certain questions or to withdraw with no penalty whatsoever. This means that you will still receive compensation for your participation should you choose to withdraw. Any data you provide before choosing to withdraw during the study will also be destroyed.

To withdraw at any point during the study, simply click the “proceed” button at the bottom of each page until you reach the end of the study and the debriefing page. Doing so will not affect your compensation in any way.

Please be advised that as we do not collect personally identifying information throughout the study, after you submit your answer, it will be impossible for us to remove your data from the dataset.

**Anonymity/Confidentiality:** Your participation in this study is fully confidential. We will not ask about your name or any identifying information, however, we will record your IP address. This allows us to verify whether participants in the study are real people or bots (i.e., software applications that are programmed to perform certain tasks, for instance, fill out online surveys). Once we verify IP addresses to be genuine, we will permanently delete them from our dataset and in this way make your answers fully anonymous.

Although you have been recruited to participate in this study through MTurk, all of your responses and data will be recorded on Qualtrics (and none of your responses will be stored on MTurk.
All data on the Qualtrics server is encrypted and protected using multiple layers of security (e.g., encrypted websites and password protected storage). For more information about the security of data on Qualtrics, please see the Qualtrics security and privacy policy, which can be found at the following link: [http://www.qualtrics.com/security-statement](http://www.qualtrics.com/security-statement)

Your data will be stored and protected by Qualtrics on Toronto-based servers. Please note that data you provide may be disclosed via a court order or data breach. In view of this, we cannot absolutely guarantee the full confidentiality and anonymity of your data. With your consent to participate in this study, you acknowledge this.
Data Storing and Sharing: After we delete all IP addresses, the data will be stored on the computers of the researchers and research assistants involved with this project. As there will be no personal information associated with the data, this dataset will be stored electronically and kept indefinitely. Additionally, we will upload this anonymized dataset to an online data repository called Open Science Framework (http://osf.io/) for research and teaching purposes. Aggregate data may also be used in publications, presentations, and future research. The (fully anonymized) data from this study may be released to journals upon request. Lastly, anonymized data may be shared with trusted colleagues.

Research Funding. This research is supported by a research grant from the Social Sciences and Humanities Research Council of Canada to Dr. Wohl.

Taking the preceding information into account, do you consent to take part in the study?
☐ I consent to take part in the study
☐ I do not consent to take part in the study.
This study has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance # 117554)
A.3 Eligibility Items

1. I am at least 18 years of age.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

2. I am an American citizen.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

3. I reside in the U.S.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

4. I identify as a(n)….
   a. Asian American (not eligible – redirect to ineligibility debriefing)
   b. Black American (continue)
   c. Hispanic/Latino American (not eligible – redirect to ineligibility debriefing)
   d. White American (not eligible – redirect to ineligibility debriefing)
   e. Other (not eligible – redirect to ineligibility debriefing)
A.4 Ineligibility Debriefing

If a participant does not meet either of the criteria listed in Appendix C, they will be shown the following information:
Thank you for your interest in this study, however at this time you are not eligible to participate. If you have any questions or concerns about this, you can contact Taylor McLellan (Principal investigator; taylormclellan@email.carleton.ca).
A.5 Study Materials

**Disadvantaged Groups Survey**

Often, we form images of what members of a group are like (i.e., their traits or qualities). Of course, not every member of a group fits this image equally. But to better understand our world, it is completely normal and very useful to form an impression of different groups and the people who belong to those groups.

On the next page, we will ask you some questions about what you see as the typical traits and qualities of Asian Americans, Latino/Hispanic Americans, and Black Americans.
1. Please think of and then write down three (3) typical **traits or qualities** that you think are most characteristic of **Asian Americans** *(use a single word for each personality trait or quality)*. NOTE. Your word should **not** describe a physical characteristic (e.g., hair, skin colour, facial features, etc.).

   1) __________
   2) __________
   3) __________

2. Please think of and then write down three (3) typical **traits or qualities** that you think are most characteristic of **Latino/Hispanic Americans** *(use a single word for each personality trait or quality)*. NOTE. Your word should **not** describe a physical characteristic (e.g., hair, skin colour, facial features, etc.).

   1) __________
   2) __________
   3) __________

3. Please think of and then write down three (3) typical **traits or qualities** that you think are most characteristic of **Black Americans** *(use a single word for each personality trait or quality)*. NOTE. Your word should **not** describe a physical characteristic (e.g., hair, skin colour, facial features, etc.).

   1) __________
   2) __________
   3) __________
The U.S. Department of Agriculture, Economic, and Research Services defines “disadvantaged groups” as those who are subjected to racial or ethnic prejudice or discrimination because of their group identity, without regard for individual traits of their members (USDA ERS, 2022)

[Qualtrics will pipe the traits noted above to the following question].

4. Now, please tell us how characteristic the 9 traits or qualities of Asian Americans, Latino/Hispanic Americans, and Black Americans that you just provided are for “disadvantaged groups” in America in general. To do this, select the answer that best reflects your opinion on each attribute.

1= not at all characteristic of disadvantaged groups
2= not characteristic of disadvantaged groups
3= rather not characteristic of disadvantaged groups
4= neither not characteristic, nor characteristic of disadvantaged groups
5= somewhat characteristic of disadvantaged groups
6= characteristic of disadvantaged groups
7= very characteristic of disadvantaged groups

5. Please indicate how typical Asian Americans are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:

6. Please indicate how typical Latino/Hispanic Americans are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:
7. Please indicate how typical Black Americans are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:
A social movement is an organized effort by a large group of people to achieve a particular goal, typically a social or political one.

On the next page, we will ask you about various social movements and the extent to which you support those movements.
8. The Stop Asian Hate (SAH) movement is a human rights movement that seeks the end of hate and violence against Asian Americans and Pacific Islander Americans. A strong focus of SAH has been racism against Asian Americans related to the COVID 19 pandemic.

Please indicate to what extent you support Stop Asian Hate using a scale where 0 means “I do not support at all” and 100 indicates “I fully support.”

- My support for the Stop Asian Hate movement

9. The #DREAMers movement was started by young people in the U.S., often children of undocumented immigrants, whose goal was to pressure the Senate to support the ‘Development, Relief, and Education for Alien Minors Act’ (DREAM Act), giving them legal status in the U.S. and ultimately providing basic rights to undocumented Latino/Hispanic immigrants in the U.S.

Please indicate to what extent you support the #DREAMers Act using a scale where 0 means "I do not support at all" and 100 indicates "I fully support."

- My support for #DREAMers Act

10. The Black Lives Matter (BLM) movement is a human rights movement that seeks the end of racially motivated violence against Black Americans. A strong focus of the BLM movement is stopping police brutality against Black Americans.

Please indicate to what extent you support Black Lives Matter using a scale where 0 means "I do not support at all" and 100 indicates "I fully support."

- My support for the Black Lives Matter movement
11. Please indicate the extent to which you are willing to participate in activities on behalf of the Stop Asian Hate movement.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against racism towards Asian Americans
2) I would donate money to SAH
3) I would volunteer my time to raise funds for SAH
4) I would share a pro-SAHA story on my social media (e.g., Facebook, Twitter)

12. Please indicate the extent to which you are willing to participate in activities on behalf of #DREAMers.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against racism towards Latino/Hispanic Americans
2) I would donate money to #DREAMers
3) I would volunteer my time to raise funds for #DREAMers
4) I would share a pro-DREAMers story on my social media (e.g., Facebook, Twitter)

13. Please indicate the extent to which you are willing to participate in activities on behalf of the Black Lives Matter movement.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against racism towards Black Americans
2) I would donate money to BLM
3) I would volunteer my time to raise funds for BLM
4) I would share a pro-BLM story on my social media (e.g., Facebook, Twitter)
14. Please indicate how characteristic the 9 traits or qualities you provided earlier in this survey are for ‘Americans’. To do this, select the answer that best reflects your opinion on each attribute.

1= not at all characteristic of Americans in general
2= not characteristic of Americans in general
3= rather not characteristic of Americans in general
4= neither not characteristic, nor characteristic of Americans in general
5= somewhat characteristic of Americans in general
6= characteristic of Americans in general
7= very characteristic of Americans in general

15. Please indicate how representative you think Asian Americans are of ‘Americans’ in general by choosing one of the pictures below:

16. Please indicate how representative you think Latino/Hispanic Americans are of ‘Americans’ in general by choosing one of the pictures below:
17. Please indicate how representative you think Black Americans are of ‘Americans’ in general by choosing one of the pictures below:
Demographics

1. Age: __________

2. What is your biological sex:
   a. Male
   b. Female
   c. Intersex
   d. Prefer not to say

3. What is your gender identity:
   a. Female
   b. Male
   c. Transgender
   d. Non-binary
   e. Two-spirit
   f. My gender is __________
   g. Prefer not to say

4. What is your race/ethnicity (Please check all that apply):
   a. White/Caucasian
   b. Black/African American
   c. Indigenous or Aboriginal
   d. Asian
   e. Middle Eastern
   f. Hispanic
   g. Latino
   h. Other
   i. Prefer not to say

5. In politics people refer to the political Left (i.e., liberal) and Right (i.e., conservative). Where would you place yourself on the following scale?
   a. Strongly liberal
   b. Somewhat liberal
   c. In between
   d. Somewhat conservative
   e. Strongly conservative
   f. Don’t know/Other
A.6 Accuracy and Honesty Items & Feedback on Compensation

The following items ask you about the quality of the data you provided us with today. You will receive compensation for completing this HIT regardless of how you respond.

1. I provided good, high-quality responses.
   a. Yes
   b. No

2. I provided honest responses to all items.
   a. Yes
   b. No

We do appreciate your time and want to compensate our participants accordingly. For this study, the compensation is US $0.70. We would appreciate your feedback about this compensation amount so we can better judge compensation for subsequent studies. With this in mind, please respond to the following items:

1. I think that a payment of US $0.70 for this kind of study is:
   a. Too high
   b. Perfect
   c. Too low

2. If I was a Requester, I would offer Workers $ _____ for this kind of HIT (please respond with digits; e.g., 0.30, 0.50, 1.00, 1.25, 1.50).
A.7 Debriefing

This study has received clearance by the Carleton University Research Ethics Board-B (CUREB-B Clearance # 117554).

Thank you for participating in this study!

This post-survey information is provided to inform you of the exact nature of the research that you have just participated in.

In this study, we are assessing factors that predict when groups who experience systemic challenges in America (e.g., Black Americans) are more likely to support other groups who experience systemic challenges in America (e.g., Asian Americans, Latino/Hispanic Americans)” and “We are testing the idea that Black American participants will report greater willingness to help other disadvantaged/minority groups when they see the challenges other groups experience to be similar to the challenges Black Americas experience.

Participants were asked a series of questions that assessed whether they believe that their group represents the typical ‘disadvantaged group’/’minority group’ in America [NOTE for CUREB-B. the wording depends on the survey issued], whether they believe that other disadvantaged/minority groups (Asian Americans, Latino/Hispanic Americans) are typical of these titles, and if their responses affect their support for a movement supporting their ingroup (Black Lives Matter) and movements supporting other disadvantaged/minority groups (Stop Asian Hate, #DREAMers Act). We are testing the idea that Black American participants who believe that Black Americans are not the typical disadvantaged/minority group in America will be more likely to support other groups that are experiencing systemic challenges in America.

Compensation

Please continue onto the next page to receive your completion code. Since the compensation for the study will be given directly by MTurk, we do not require any personal or identifying information.

Where can I learn more?

Black Lives Matter:
https://blacklivesmatter.com/

Stop Asian Hate:
https://stopaapihate.org/

#DREAMers Act
https://www.americanimmigrationcouncil.org/research/dream-act-overview
**Why is this important to scientists or the general public?**

This research contributes to psychologists’ knowledge and understanding of intergroup relations. Specifically, findings from this study shed light on important social movements, and factors that influence their support.

**What if I have questions later?**

If you have any remaining concerns, questions, or comments about this research, please feel free to contact:

Taylor McLellan (MA student; taylormclellan@cmail.carleton.ca)
Dr. Michael Wohl (Supervisor, Principal Investigator; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).
Dr. Anna Stefaniak (Post-doctoral researcher; anna.stefaniak@carleton.ca or +1-613-520-2600 ext. 6312).

Should you have any ethical concerns about this research, please contact the Chair of the Carleton University Ethics Board-B, (+1 613-520-2600 ext. 4085 or ethics@carleton.ca).

Thank you for participating in this research! This research has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance # 117554).
Appendix B

B.1 Recruitment Announcement

Announcement for Recruitment (Prolific)

Title of the study: Racial issues in America.

Description: In this study, we are interested in your opinions about people in various US disadvantaged groups in America. Specifically, we are interested in your thoughts and opinions about how people in disadvantaged groups who are experiencing systemic challenges in America consider their challenges in America in comparison to other disadvantaged groups. Your participation as well as your responses will be strictly confidential. Only researchers associated with the project will know that you participated in the study, and no one will know how you responded to the questions asked.

Eligibility Requirements

Eligibility Requirements:
1. Must be at least 18 years of age
2. Must be an American citizen and reside in the U.S.
3. Must identify as a Black American.

Risks: We can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some anxiety or distress when thinking about some social issues that exist in America. In the event that you feel anxiety or distress, you may withdraw at any time during the study without penalty. Information will then be provided linking you to appropriate health services in your local area.

Duration and compensation: This study takes approximately 10 minutes, and upon completion, you will receive US $1.21 for your participation.

Researchers: This research is being conducted by Taylor McLellan, Dr. Anna Stefaniak, and Dr. Michael J. A. Wohl at Carleton University (Ottawa, ON).

Ethics: This study has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance #117554) and is supported by a research grant from the Social Sciences and Humanities Research Council of Canada to Dr. Wohl.
B.2 Consent Form

Informed Consent

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent must provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study.

This study has received clearance by the Carleton University Research Ethics Board-B (CUREB-B Clearance # 117554). Ethics expiration date: TBA.

Eligibility: All participants must: 1) Be at least 18 years of age, 2) Be an American citizen, residing in the U.S. 3) identify as Black American.

Please note that you will be assessed on your eligibility to participate immediately following this consent form. Only eligible participants will be permitted to participate in the survey and receive compensation.

Study title: Racial issues in America.

Research personnel: The following people are involved in this study, and may be contacted at any time if you have questions or concerns:

Taylor McLellan (Principal Investigator; taylormcellan@cmail.carleton.ca)
Dr. Michael Wohl (Supervisor; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).
Dr. Anna Stefaniak (Postdoctoral Researcher; anna.stefaniak@carleton.ca; +1-613-520-2600 ext. 6312).
Isabella Bossom (Research Lab Manager; isabellabossom@cmail.carleton.ca).

Concerns: Should you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone: 613-520-2600 ext. 4085 or by email:ethics@carleton.ca). For all other questions about the study, please contact the researchers.

Purpose and Task Requirements: In this study, we are interested in your opinions about people in various US disadvantaged groups in America. Specifically, we are interested in your thoughts and opinions about how people in disadvantaged groups who are experiencing systemic challenges in America consider their challenges in America in comparison to other disadvantaged groups. The study will take approximately 10 minutes to complete.

Benefits/compensation. We are offering eligible participants US $1.21 for participating.

Duration and locale. The survey will be administered online and should take approximately 10 minutes to complete. Be assured that your name will not be associated in any way with the research findings.
**Potential risk/discomfort.** We can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some stress when thinking about some social issues. If you do experience any distress or discomfort, you may wish to contact one of the helplines nearest to your location.

1. Safe Black Space is an organization that offers various services to those of Africa ancestry to address individual and community to cultural and racial trauma: 
   [https://www.safeblackspace.org/](https://www.safeblackspace.org/)

2. InnoPsych is an online platform where people of color are able to find and connect with therapists of color to help with their wellness journey using content created by and made for people of color:
   [https://www.innopsych.com/](https://www.innopsych.com/)

If you feel any discomfort or distress while reading a question in this study, please feel free to leave it blank – no penalty will be incurred.

**Right to Withdraw:** Your participation in this study is entirely voluntary. At any point during the study, you have the right not to complete certain questions or to withdraw with no penalty whatsoever. This means that you will still receive compensation for your participation should you choose to withdraw. Any data you provide before choosing to withdraw during the study will also be destroyed.

To withdraw at any point during the study, simply click the “proceed” button at the bottom of each page until you reach the end of the study and the debriefing page. Doing so will not affect your compensation in any way.

Please be advised that as we do not collect personally identifying information throughout the study, after you submit your answer, it will be impossible for us to remove your data from the dataset.

**Anonymity/Confidentiality:** Your participation in this study is fully confidential. We will not ask about your name or any identifying information, however, we will record your IP address. This allows us to verify whether participants in the study are real people or bots (i.e., software applications that are programmed to perform certain tasks, for instance, fill out online surveys). Once we verify IP addresses to be genuine, we will permanently delete them from our dataset and in this way make your answers fully anonymous.

Although you have been recruited to participate in this study through Prolific, all of your responses and data will be recorded on Qualtrics (and none of your responses will be stored on Prolific). All data on the Qualtrics server is encrypted and protected using multiple layers of security (e.g., encrypted websites and password protected storage). For more information about the security of data on Qualtrics, please see the Qualtrics security and privacy policy, which can be found at the following link: [http://www.qualtrics.com/security-statement](http://www.qualtrics.com/security-statement)

Your data will be stored and protected by Qualtrics on Toronto-based servers. Please note that data you provide may be disclosed via a court order or data breach. In view of this, we cannot absolutely
guarantee the full confidentiality and anonymity of your data. With your consent to participate in this study, you acknowledge this.

**Data Storing and Sharing:** After we delete all IP addresses, the data will be stored on the computers of the researchers and research assistants involved with this project. As there will be no personal information associated with the data, this dataset will be stored electronically and kept indefinitely. Additionally, we will upload this anonymized dataset to an online data repository called Open Science Framework (http://osf.io/) for research and teaching purposes. Aggregate data may also be used in publications, presentations, and future research. The (fully anonymized) data from this study may be released to journals upon request. Lastly, anonymized data may be shared with trusted colleagues.

**Research Funding.** This research is supported by a research grant from the Social Sciences and Humanities Research Council of Canada to Dr. Wohl.

**Taking the preceding information into account, do you consent to take part in the study?**

☐ I consent to take part in the study
☐ I do not consent to take part in the study.

This study has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance # 117554)
B.3 Eligibility Items

1. I am at least 18 years of age.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

2. I am an American citizen.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

3. I reside in the U.S.
   a. Yes (continue)
   b. No (not eligible – redirect to ineligibility debriefing)

4. I identify as a(n)….
   a. Asian American (not eligible – redirect to ineligibility debriefing)
   b. Black American (continue)
   c. Hispanic/Latino American (not eligible – redirect to ineligibility debriefing)
   d. White American (not eligible – redirect to ineligibility debriefing)
   e. Other (not eligible – redirect to ineligibility debriefing)
B.4 Ineligibility Debriefing

If a participant does not meet either of the criteria listed in Appendix C, they will be shown the following information:

Thank you for your interest in this study, however at this time you are not eligible to participate. If you have any questions or concerns about this, you can contact Taylor McLellan (Principal investigator; taylormclellan@cmail.carleton.ca).
B.5 Study Materials

We would first like to ask you about your opinions on some groups in America. The U.S. Department of Agriculture, Economic, and Research Services defines “disadvantaged groups” as those who are subjected to prejudice or discrimination because of their group identity, without regard for individual traits of their members (USDA ERS, 2022).

1. Now, please indicate how typical Latino/Hispanic Americans are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:

2. Please indicate the extent to which you are willing to participate in activities on behalf of Latino/Hispanic Americans.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against racism towards Latino/Hispanic Americans
2) I would donate money to a political candidate who proposes pro-Latino/Hispanic American policies.
3) I would volunteer my time to organize a march in support of Latino/Hispanic American rights.
4) I would share a story on my social media (e.g., Facebook, Twitter) that condemns racism against Latino/Hispanic Americans.
3. Please indicate the extent to which you agree with the following items:

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) Black Americans have obviously suffered greater harm than Latino/Hispanic Americans
2) Black Americans suffered greater injustices than Latino/Hispanic Americans.
3) It is very important for me that people would recognize that Black Americans have undergone greater suffering than Latino/Hispanic Americans.
4) I want others to realize that the injustices that Black Americans suffer are much graver than those that Latino/Hispanic Americans suffer.
5) People must know that Black Americans are the real victim in America

4. Please indicate how typical Native Americans are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:

5. Please indicate the extent to which you are willing to participate in activities on behalf of Native Americans.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against discrimination towards Native Americans.
2) I would donate money to a political candidate who proposes pro-Native American policies.
3) I would volunteer my time to organize a march in support of Native American rights.
4) I would share a story on my social media (e.g., Facebook, Twitter) that condemns discrimination against Native Americans.

6. Please indicate the extent to which you agree with the following items:

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) Black Americans have obviously suffered greater harm than Native Americans
2) Black Americans suffered greater injustices than Native Americans.
3) It is very important for me that people would recognize that Black Americans have undergone greater suffering than Native Americans.
4) I want others to realize that the injustices that Black Americans suffer are much graver than those that Native Americans suffer.
5) People must know that Black Americans are the real victim in America
7. Please indicate how typical **Black Americans** are of ‘disadvantaged groups’ in America in general by choosing one of the pictures below:

8. Please indicate the extent to which you are willing to participate in activities on behalf of **Black Americans**.

1=strongly disagree
2=disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=agree
7=strongly agree

1) I would take part in a protest against racism towards Black Americans.
2) I would donate money to a political candidate who proposes pro-Black American policies.
3) I would volunteer my time to organize a march in support of Black American rights.
4) I would share a story on my social media (e.g., Facebook, Twitter) that condemns racism against Black Americans.

9. Now, we would like to ask you about a hypothetical situation:

Imagine that the research team provided you with $12 to donate to the following causes, how would you allocate that $12?

**Please note.** You can split the money however you would like between one, two, or three of the causes below. Please type in how much you would like to allocate to each cause in the boxes given:
1) A cause that supports the rights of **Latino/Hispanic Americans**: $____
2) A cause that supports the rights of **Native Americans**: $____
3) A cause that supports the rights of **Black Americans**: $____

**Demographics**

1. **Age**: ___

2. **What is your biological sex:**
   a. Male
   b. Female
   c. Intersex
   d. Prefer not to say

3. **What is your gender identity:**
   a. Female
   b. Male
   c. Transgender
   d. Non-binary
   e. Two-spirit
   f. My gender is ______
   g. Prefer not to say

4. **What is your race/ethnicity (Please check all that apply):**
   a. White/Caucasian
   b. Black/African American
   c. Indigenous or Aboriginal
   d. Asian
   e. Middle Eastern
   f. Hispanic
   g. Latino
   h. Other
   i. Prefer not to say

5. In politics people refer to the political Left (i.e., liberal) and Right (i.e., conservative). Where would you place yourself on the following scale?
   a. Strongly liberal
   b. Somewhat liberal
   c. In between
   d. Somewhat conservative
   e. Strongly conservative
   f. Don’t know/Other
B.6 Accuracy and Honesty Items & Feedback on Compensation

The following items ask you about the quality of the data you provided us with today. You will receive compensation for completing this HIT regardless of how you respond.

3. I provided good, high-quality responses.
   a. Yes
   b. No

4. I provided honest responses to all items.
   a. Yes
   b. No

We do appreciate your time and want to compensate our participants accordingly. For this study, the compensation is US $1.21. We would appreciate your feedback about this compensation amount so we can better judge compensation for subsequent studies. With this in mind, please respond to the following items:

3. I think that a payment of US $1.21 for this kind of study is:
   a. Too high
   b. Perfect
   c. Too low

4. If I was a Requester, I would offer Workers $ _____ for this kind of HIT (please respond with digits; e.g., 0.30, 0.50, 1.00, 1.25, 1.50).
B.7 Debriefing

This study has received clearance by the Carleton University Research Ethics Board-B (CUREB-B Clearance # 117554).

Thank you for participating in this study!

This post-survey information is provided to inform you of the exact nature of the research that you have just participated in.

In this study, we are assessing when groups who experience systemic challenges in America (e.g., Black Americans) are more likely to support other groups who experience systemic challenges in America (e.g., Latino/Hispanic Americans).

Participants were asked a series of questions that assessed whether they believe that their group represents the typical ‘disadvantaged group’ in America, whether they believe that other disadvantaged groups (Latino/Hispanic Americans, Muslim Americans) are typical of these titles, and if their responses affect their support for their ingroup (Black Americans) and the other disadvantaged groups (Latino/Hispanic Americans, Muslim Americans).

We are testing the idea that Black American participants who believe that Black Americans are not the typical disadvantaged group in America will be more likely to support other groups that are experiencing systemic challenges in America.

Compensation

Please continue onto the next page to receive your completion code. Since the compensation for the study will be given directly by Prolific, we do not require any personal or identifying information.

Why is this important to scientists or the general public?

This research contributes to psychologists’ knowledge and understanding of intergroup relations. Specifically, findings from this study shed light on disadvantaged groups and factors that influence their support.

What if I have questions later?

If you have any remaining concerns, questions, or comments about this research, please feel free to contact:
Taylor McLellan (MA student; taylormcellan@cmail.carleton.ca)
Dr. Michael Wohl (Supervisor; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).
Dr. Anna Stefaniak (Post-doctoral researcher; anna.stefaniak@carleton.ca or +1-613-520-2600 ext. 6312).
mailto:adriannamabbott@cmail.carleton.ca Isabella Bossom (Research Lab Manager; isabellabossom@cmail.carleton.ca).
Should you have any ethical concerns about this research, please contact the Chair of the Carleton University Ethics Board-B, (+1 613-520-2600 ext. 4085 or ethics@carleton.ca).
Thank you for participating in this research! This research has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance # 117554).