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Empirical Research Paper

Strategic Mindsets and Support for Social Change: Impact Mindset Explains Support for Black Lives Matter Across Racial Groups

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Abstract

How does the self-relevance of a social movement shape individuals' engagement with it? We examined the decision-making processes that underlie support for Black Lives Matter (BLM) among Black, Hispanic, Asian, and White Americans. We find significant between-group differences in levels of support for BLM, both in terms of past behavior (Study 1) and in terms of future intentions to support the movement (Study 2). These differences notwithstanding, thinking about how one's decisions impact others - which we label *impact mindset* - explains support for BLM across racial groups, cross-sectionally as well as longitudinally (over 8 months later). Our findings underscore the equivalence of the impact mindset construct across racial groups and its predictive power in the context of BLM. We conclude that, although the struggle for racial justice has different meanings for different racial groups, the same mindset underlies both in-group advocacy and allyship in the context of BLM.

Keywords

allyship, race, justice, social movements, collective action, strategic thinking

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The murder of George Floyd on May 25, 2020 sparked unparalleled civil unrest. Protests and calls for racial justice quickly spread across the United States and the world, with millions demonstrating their support for the Black Lives Matter (BLM) movement. Black, Hispanic, Asian, and White Americans rallied, marched, and protested together to promote social change. All fought for the same cause, but did they do it for the same reason(s)?

To illuminate how the self-relevance of a social movement shapes individuals' thinking about and support for a social movement, we integrate insights from the intergroup relations and social movement literatures with recent advances in research on social decision-making. We use a multifaceted conceptualization of strategic thinking to examine how people reason about the choice to support a social movement. This novel theoretical integration enables us to explore the shared versus unique decision-making processes that govern choices to support BLM among Black, Hispanic, Asian, and White Americans in the United States.

We begin by outlining our theoretical perspective on strategic thinking. We then review recent research on the factors that shape reactions to BLM among members of different racial groups, and explain how our multifaceted conceptualization of strategic thinking advances knowledge on the thinking processes that underlie decisions to support BLM. We describe findings from two pilot studies that help motivate our hypotheses and then report findings from two longitudinal studies that use our multifaceted conceptualization of strategic thinking to explain support for BLM.

Thinking Strategically

Prevailing models of strategic thinking equate it with competitive shrewdness. For example, the international bestseller *Thinking Strategically* defines strategic thinking as "the art of outdoing an adversary, knowing that the adversary is trying to do the same to you" (Dixit & Nalebuff, 1991, p. ix). Consistent with this cutthroat definition, researchers have conceptualized strategic intelligence as "the ability to anticipate competitors' behavior and preempt it" (Levine et al., 2017, p. 2392) and depth of strategic reasoning as "managers' ability to

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conjecture competitor behavior" (Goldfarb & Xiao, 2011, p. 3130). The pervasive use of terms such as "adversary" and "competitor" illustrates the antagonistic lens through which researchers typically view strategic thinking.

Consistent with the focus on outperforming rivals in markets, research in economics and management typically employs strictly-competitive (i.e., zero-sum) games to study individual differences in the depth of strategic reasoning (Arad & Rubinstein, 2012; Camerer, 2003; Nagel, 1995). In these games, the only way in which individuals can demonstrate their wits is through cutthroat competition. The best strategic thinkers in these experimental paradigms are selfishly rational individuals who win a competition by engaging in superior step-by-step iterated reasoning.

We diverge from this narrow economic approach and offer a broader perspective on strategic thinking. We propose that opportunities to think strategically arise in cooperative interactions (e.g., singing a duet), mixed-motive interactions (e.g., multi-issue negotiations), as well as in competitive interactions (e.g., playing chess). Put differently, opportunities to think strategically emerge whenever people can influence each other through their decisions. Consistent with this view, strategic thinking can be found in everyday interactions with friends and family (Halevy & Phillips, 2015), when conflicts arise in organizations (Halevy et al., 2014), during business negotiations (Halevy et al., 2012), as well as when thinking about large-scale societal problems that require collective action, such as voting in general elections (Quattrone & Tversky, 1984) and managing intergroup conflict (Halevy et al., 2006). Thus, strategic thinking is germane whenever interdependence exists between individuals or groups.

A Multidimensional Conceptualization of Strategic Thinking

We define strategic thinking as a cognitive process whereby people reason "about how interdependent parties can influence their own and others' outcomes" (Halevy, 2020, p. 648). This definition lends itself to a wide range of real-world situations in which people readily acknowledge that their own actions and others' actions jointly determine everyone's outcomes (e.g., should I get vaccinated? should I vote? should I recycle?). Building on interdependence theory (Kelley et al., 2003; Kelley & Thibaut, 1978), we conceptualize four mindsets related to social interdependence. In interactions that involve the self as an active decision-maker (rather than as a third-party observer for example), an individual may have an *impact* mindset (how do my actions shape others' outcomes?), a *dependency* mindset (how do others' actions shape my outcomes?), an *egocentric* mindset (how do my actions shape my outcomes?), and an *altercentric* mindset (how do others' actions shape their outcomes?). Importantly, different mindsets are not mutually exclusive ways of thinking; rather, they complement each other and can coexist as people reason about their choices. For example, an individual who cares deeply about a particular decision may rely on all four mindsets more than an individual who cares very little about the same decision. Taken together, we refer to these four mindsets as the Impact-Dependency-Egocentric-Altercentric (IDEA) model of strategic thinking (Halevy, 2020).

We conducted two pilot studies to establish the psychological meaning of the four mindsets outlined in the IDEA model (see the Online Supplementary Materials [OSM] for complete information). To assess how much individuals think through each mindset, these studies utilized the 12-item Strategic Thinking Scale (STS, Halevy, 2020). The first pilot study ($N = 299$) established that the four mindsets are distinct from other *epistemic orientations*, such as need for cognition, need for cognitive closure, and tendencies for cognitive reflection, by documenting weak associations between the IDEA mindsets and these constructs (range: $r = -.14$ to $r = .27$). The second pilot study ($N = 309$) established that the four mindsets are distinct from other *interpersonal orientations*. IDEA mindsets that focus on others' outcomes (i.e., the impact and altercentric mindsets) correlated positively with tendencies for perspective-taking ($r_{impact} = .47$, $r_{altercentric} = .36$) and empathetic concern ($r_{impact} = .41$, $r_{altercentric} = .29$), benevolence values ($r_{impact} = .31$, $r_{altercentric} = .23$), communal orientation ($r_{impact} = .44$, $r_{altercentric} = .31$), and interdependent self-construal ($r_{impact} = .33$, $r_{altercentric} = .33$). The magnitude of these associations indicates that the IDEA mindsets are related to, but conceptually distinct and empirically distinguishable from, these interpersonal orientations.

The Relevance of Strategic Thinking for Collective Action

Previous research found theoretically meaningful relations between the IDEA mindsets and individual behavior in the context of an emerging collective action problem (Halevy, 2020). Specifically, mindsets that focus on one's own outcomes (i.e., egocentric and dependency) negatively predicted donation of money to health organizations and were unrelated to intentions to comply with social distancing guidelines during the early months of the COVID-19 pandemic. In contrast, mindsets that focus on others' outcomes (i.e., impact and altercentric) positively predicted donations to health organizations and correlated positively with intentions to comply with social distancing guidelines during the early months of the COVID-19 pandemic. These findings highlight the relevance of the IDEA mindsets for explaining individual behavior in emerging, real-world, collective action situations. The current research applies this novel framework to explain choices to support the BLM social movement.

On the Varieties of Support for BLM

Recent years witnessed an increased interest in the psychological underpinnings of support for the BLM movement (Cooley et al., 2019; Craig et al., 2020; Leach & Allen, 2017;

Wilkins et al., 2019). Whereas some research highlights the differing reactions of members of different racial groups to BLM (Radke et al., 2020; Reinka & Leach, 2017, 2018; Sawyer & Gampa, 2018; Selvanathan et al., 2020), other research suggests that certain psychological processes may similarly propel members of different racial groups to support BLM (Hope et al., 2016; Klavina & van Zomeren, 2020).

We propose that behavioral support of BLM has different psychological meanings for members of different racial groups, which helps explain between-group differences in support for BLM. Black Americans encounter more police brutality than members of other racial groups in society relative to their proportion in the population, which motivated the inception of the BLM movement (Cooley et al., 2020; Hall et al., 2016). Thus, Black Americans' support for BLM takes the form of *in-group advocacy*, defined as supporting social change that benefits one's membership group. In contrast, among Hispanic, Asian, and White Americans, supporting BLM entails supporting racial justice on behalf of an out-group. Although Black Americans constitute an out-group for members of other racial groups in society, Hispanic, Asian, and White Americans may think about BLM differently given the different positions that their groups occupy in society and the kinds of stereotypes and prejudice they encounter (Zou & Cheryan, 2017).

Hispanic and Asian Americans are both victims of anti-minority bias in the United States and thus share a common fate of being targets of prejudice and discrimination (Cortland et al., 2017; Craig & Richeson, 2012; Ho et al., 2012). However, there are meaningful differences in the manner in which Hispanic and Asian Americans are perceived and treated. Specifically, Asian Americans are ascribed lower status than White Americans, but higher status than both Hispanic and Black Americans, who share the lowest ascribed status in society (Kahn et al., 2009). Furthermore, members of different racial minority groups are subjected to different levels of prejudice and different levels of anger, disgust, fear, pity, and envy (Cottrell & Neuberg, 2005; Cuddy et al., 2007).

Although Hispanic and Black Americans share the lowest perceived status in society, and report less favorable and trusting attitudes toward the police than White Americans (Lundman & Kaufman, 2003; Reitzel et al., 2004), Hispanic Americans tend to hold more favorable attitudes toward the police than Black Americans (Rosenbaum et al., 2005; Weitzer & Tuch, 2002, 2005). Given this pattern of similarities and differences, we consider Hispanic Americans' support for BLM a form of *out-group solidarity*, defined as supporting social change that benefits a similarly disadvantaged out-group.

Asian Americans are often viewed as outsiders and are subjected to anti-minority bias (Cheryan & Monin, 2005; Craig & Richeson, 2014; Kim, 1999; Xu & Lee, 2013). However, they are commonly seen as having higher status than Black and Hispanic Americans (Fiske et al., 1999; Lin et al., 2005). Furthermore, they are not targeted disproportionately by the perceived transgressions that the BLM movement highlights. Hence, we consider Asian Americans' support for BLM a form of *minority allyship*, defined as support by members of a relatively advantaged minority group for social change that benefits a relatively disadvantaged out-group. Using a similar logic, because White Americans are members of the dominant majority group in the United States, we consider their support for BLM a form of *majority allyship*, defined as support by dominant group members for social change that benefits a relatively disadvantaged out-group.

Considering all four racial groups together enables additional comparisons of theoretical importance. Given that neither Hispanic nor Asian Americans are targeted by the perceived transgressions highlighted by BLM, comparing Hispanic Americans' out-group solidarity with Asian Americans' minority allyship sheds light on the role that societal status potentially plays in decisions to fight for racial justice. Finally, examining the factors that explain Black Americans' support for BLM as compared with those that explain Hispanic, Asian, and White Americans' support for BLM can reveal the role that the social-identity-based relevance of a social movement plays in motivating behavioral support for it.

The Current Research

The current research responds to recent calls to consider more than just two groups when studying intergroup relations (Dixon et al., 2020), and investigate the thinking processes that underlie support for BLM among members of different groups (Craig et al., 2020). Here, we use the IDEA model to examine the mindsets that underlie Black, Hispanic, White, and Asian Americans' thinking about BLM, as well as the extent to which thinking about BLM with different mindsets explains behavioral support for the movement.

To provide historical context, we examine support for BLM following the murder of George Floyd, an event that some scholars consider a mega-threat (i.e., a highly-publicized negative event related to individuals' social identities; Leigh & Melwani, 2019). Although events of this kind can lead to behavioral withdrawal (e.g., due to fear or anxiety: Kashdan & Kane, 2011; Leigh & Melwani, 2021), the murder of George Floyd increased behavioral engagement with the BLM movement across the United States and many other countries.

As a social movement, BLM focuses on a problem that impacts Black Americans disproportionately more than members of other racial groups in society. Thus, BLM is unsurprisingly more self-relevant for individuals who identify as Black Americans than for members of other racial groups. The success of the BLM movement can potentially result in instrumental as well as symbolic benefits for individuals who identify as Black Americans (e.g., physical and psychological safety). In light of the greater self-relevance of BLM for Black Americans compared to members of other racial groups, we predicted that

Hypothesis 1 (H1): Black Americans will show greater behavioral support for BLM than members of other racial groups.

The self-relevance of a social movement may also influence individuals' mindsets as they decide whether and how much to engage with a social movement. Recall that two of the four mindsets identified in the IDEA model relate to outcomes for the self (the dependency and egocentric mindsets). The self-functions as a powerful attentional anchor. For example, individuals often project from the self when thinking about others (Ames, 2004; Cho & Knowles, 2013; Epley et al., 2004), and tend to believe that others share their opinions and beliefs (Mullen et al., 1985; Ross et al., 1977).

However, prior research reports mixed evidence concerning the role that self-interest plays in shaping social and political attitudes and behavioral participation in collective action. Some research found that self-interest does not shape support for sociopolitical causes, although it does shape self-reported behavior (e.g., opposition to busing: Green & Cowden, 1992; Sears & Funk, 1991). In contrast, other research shows that White Americans' attitudes on racial issues are often guided by concerns around outcomes for themselves and other White Americans (Lowery et al., 2006; Unzueta & Lowery, 2008). Given these inconsistent findings, we sought to examine how different mindsets that vary in terms of their focus on actions by and outcomes for the self versus others relate to support of BLM. In considering the powerful gravitational pull of the self on human affect, cognition, and motivation, we reasoned that, when thinking about the decision to support a social movement, individuals for whom the movement is self-relevant would be more likely to rely on the two mindsets that consider outcomes for the self. Thus, we predicted that

Hypothesis 2 (H2): Black Americans will score higher than members of other racial groups on the egocentric (H2a) and dependency (H2b) mindsets when thinking about the decision to support BLM.

Importantly, Black Americans may support the movement not only because its success can potentially benefit them personally, but also because its success can potentially benefit fellow in-group members and society as a whole. Similarly, members of other racial groups may support the social movement because they identify with values of racial justice and equality for all. Thus, concern for others and goals broader than oneself may drive support for a social movement (Waytz et al., 2019).

Conceptually, impact mindset is closely related to empathy as it focuses on the relationship between oneself and others. An impact mindset reflects a substantial mental (i.e., affective, cognitive, and motivational) investment in the well-being of others. Empirically, impact mindset correlated most strongly with prosocial orientations (e.g., benevolence values and empathetic concern; see Pilot Study 2 in the OSM) and prosocial behavior in the context of the COVID-19 pandemic (Halevy, 2020). Given the established positive effect of empathy on prosocial action in general (Batson et al., 1988; Eisenberg & Miller, 1987), and specifically on social movement participation (Santos, 2020; Sirin et al., 2017), we predicted that

Hypothesis 3 (H3): An impact mindset will explain support for BLM more than other mindsets across all racial groups.

Finding support for H3 will indicate that, despite between-group differences in mean levels of support for BLM and in the tendency to think about choices to support BLM through mindsets that focus on outcomes for oneself (i.e., egocentric and dependency), an impact mindset underlies in-group advocacy (among Black Americans), out-group solidarity (among Hispanic Americans), minority allyship (among Asian Americans), and majority allyship (among White Americans) in the context of BLM.

Below, we report findings from two preregistered studies that test our hypotheses. In all studies, we opened the surveys in stages to members of different racial groups based on Prolific's preexisting demographic categories to ensure near-equal participation of respondents of different races. Furthermore, in all studies, we report all manipulations and measures, explain how sample size was determined, and report all data exclusions (if any). All preregistrations, questionnaires, data files, and general research materials are available online (OSF link: https://osf.io/r2tc9/).

Study 1: Strategic Thinking and Past Engagement With BLM

Study 1 assessed participants' mindsets in the context of BLM and their behavioral support for BLM. We adapted the STS (Halevy, 2020) to the context of decisions to support BLM and created a measure of support for BLM that focused on concrete behaviors taken during the 3 months of heightened protests that directly followed the murder of George Floyd in 2020. We used a longitudinal design to examine how different mindsets relate to decisions to support BLM, both in the short term and in the long term. We sought to illuminate the explanatory value of the IDEA mindsets when adjusting for several potentially relevant predictors including individual differences in values, traits, and political ideologies (which we collected in Wave 1), and variables related to strategic thinking and support for BLM (which we collected in Wave 2). Hence, we assessed individual differences in self-interest and other-interest, which are relevant yet conceptually distinct from the four IDEA mindsets, as well as individual differences in intergroup attitudes and emotions (e.g., empathy toward Black Americans) that may explain variance in engagement with BLM.[1]

Method

Participants. Data collection in Wave 1 took place between September 26, 2020 and October 1, 2020. We opened the study to 800 U.S. participants on Prolific and recorded a total of 821 observations. Following the preregistration, we excluded observations from participants who attempted to take the study multiple times ($n = 16$), did not self-identify as Black, Hispanic, Asian, or White Americans ($n = 5$), or were non-U.S. citizens ($n = 6$) or residents ($n = 5$). In addition, 14 participants left the survey before completing the main measures of interest, resulting in a final sample of 775 participants in Wave 1 (gender: 52.3% male, 46.8% female, 0.9% nonbinary/other; age: $M = 29.6$, $SD = 10.1$; race: 28.1% White/Caucasian, 24.6% Black/African American, 22.2% Hispanic/Latinx, 25.0% Asian/Asian American).

Data collection in Wave 2 took place between May 4, 2021 and June 24, 2021. We invited back all 775 participants to complete Wave 2 and recorded 506 observations (65.3% retention rate). Following our preregistration, we excluded observations from participants who attempted to take the study multiple times ($n = 2$) or failed the attention check ($n = 35$). In addition, 13 participants left the study before responding to the main measures of interest, resulting in a final sample of 456 participants in Wave 2 (gender: 51.5% male, 47.6% female, 0.9% nonbinary/other; age: $M = 31.0$, $SD = 10.8$; race: 29.6% White/Caucasian, 20.8% Black/African American, 23.7% Hispanic/Latinx, 25.9% Asian/Asian American).

Procedure and measures in Wave 1. After providing consent, participants reported their personal value priorities and personality traits. We assessed personal value priorities with the Ten Item Value Inventory (Sandy et al., 2017). Participants indicated how much each value type (e.g., benevolence, power) serves as a guiding principle in their lives. We assessed participants' personality traits along the Big Five dimensions with the Ten Item Personality Inventory (Gosling et al., 2003; e.g., extroversion, openness to experience). Participants responded to both measures using scales ranging from 1 = *does not describe me* to 5 = *describes me extremely well*.

We assessed social dominance orientation, which captures an ideological preference for a group-based hierarchy in society, with a six-item scale (Ho et al., 2015; e.g., "Inferior groups should stay in their place"). Participants reported their agreement with each statement using scales ranging from 1 = *strongly disagree* to 7 = *strongly agree* ($\alpha = .89$). We assessed system justification, an ideological tendency to view the existing social order as just, with an eight-item scale (Kay & Jost, 2003; for example, "In general, I find society to be fair."). Participants reported their agreement with each statement using scales ranging from 1 = *strongly disagree* to 7 = *strongly agree* ($\alpha = .88$).

Afterwards, participants reported on their mindsets and support for BLM. We assessed the IDEA mindsets using the STS, with three items assessing each mindset (Impact, Dependency, Egocentric, Altercentric), administered in a randomized order. The instructions that preceded the STS read as follows:

> The statements below describe different ways of thinking while making decisions. We want to know how you think when making choices related to your engagement with Black Lives Matter. Please indicate how much you agree or disagree with each of the following statements. When I make decisions related to my engagement with Black Lives Matter I think about. . .

Table 1. The 12-Item Strategic Thinking Scale.

Impact mindset
1. I think about how my decisions will influence other people.
2. I think about how the choices I make will influence others.
3. I think about the consequences of my actions for others.
Dependency mindset
1. I think about how others' decisions will influence me.
2. I think about how the choices others make will shape my outcomes.
3. I think about the consequences of others' actions for me.
Egocentric mindset
1. I think about how my decisions will influence me.
2. I think about how the choices I make will shape my outcomes.
3. I think about the consequences of my actions for me.
Altercentric mindset
1. I think about how others' decisions will influence them.
2. I think about how the choices others make will shape their outcomes.
3. I think about the consequences of others' actions for them.

Table 1 presents the 12 STS items from Halevy (2020). Participants responded to this measure using scales ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Reliabilities for the IDEA dimensions were .90, .87, .90, and .89, respectively. A confirmatory factor analysis confirmed the measurement equivalence of the IDEA mindsets across the four racial groups (see Figures 1 and 2 for Studies 1 and 2, respectively; see OSM for details).

Participants then reported their support for BLM: "Think about the past 3 months. The following questions focus on your engagement with the social movement BLM. Please indicate how many times you have engaged in each of the following behaviors during the past 3 months." Participants reported the frequency with which they engaged in 10 different BLM-related behaviors that we presented in a randomized order: "I donated money to Black Lives Matter"; "I donated material goods to Black Lives Matter"; "I worked to raise awareness to issues and policies related to Black Lives Matter"; "I helped organize activities in my community in support of the mission of Black Lives Matter"; "I signed a petition in support of Black Lives Matter"; "I participated in a protest, rally, march, or other gatherings related to Black Lives Matter"; "I attended meetings in my community related to Black Lives Matter"; "I recruited others in my

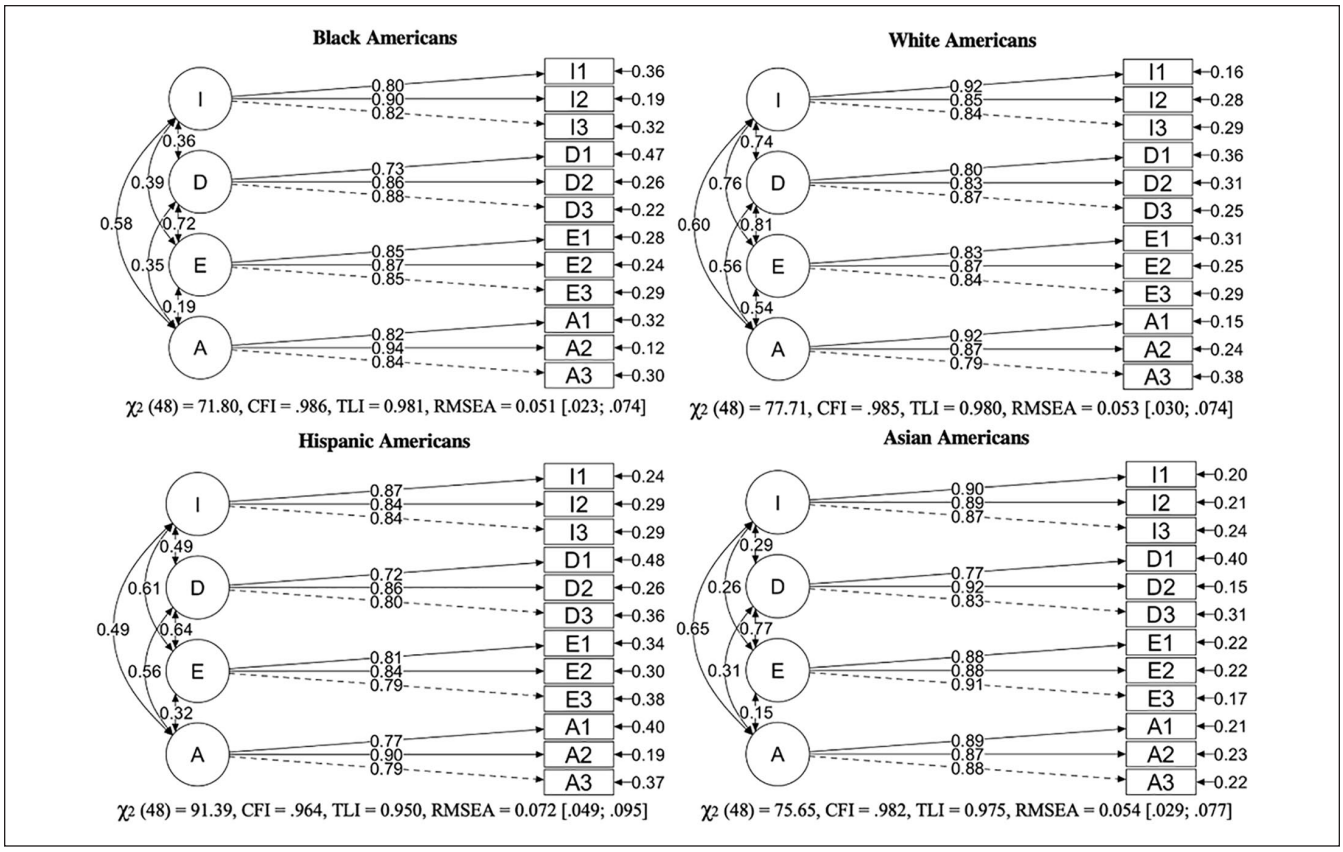

Figure 1. Coefficients From a Multi-Group Confirmatory Factor Analysis and Model Fit Indices by Racial Group (Study 1).
Note. I = impact mindset, D = dependency mindset, E = egocentric mindset, A = altercentric mindset.

community/network to support Black Lives Matter"; "I created and/or posted signs or artwork related to Black Lives Matter"; and "I posted information on social media in support of Black Lives Matter" ($\alpha = .90$). Participants responded to these items using 5-point scales with the following anchors: "Never," "Once," "2–3 times," 4–6 times," and "7 times or more." Participants then reported their demographics and exited the survey.

Procedure and measures in Wave 2. Participants completed the same 12-item STS (reliabilities for the IDEA mindsets were .91, .87, .91, and .89, respectively) and support for BLM measure ($\alpha = .90$) as in Wave 1. One of our goals in Wave 2 was to ascertain the predictive power of the IDEA dimensions over time when considering additional relevant constructs as predictors. We, therefore, included several measures (administered in a randomized order) to assess constructs related either to strategic thinking or to support for BLM. These measures enabled us to explore the role that the IDEA mindsets play in explaining support for BLM in models that adjust for additional individual differences.

All measures below used scales ranging from 1 = *strongly disagree* to 7 = *strongly agree* unless indicated otherwise. We used four items to assess self-interest and other-interest (Gerbasi & Prentice, 2013). Example items include: "I keep an eye out for my interests" (self-interest, $\alpha = .83$) and "The success of other people is important to me" (other-interest, $\alpha = .90$). We used four-item scales to assess the importance of identification with different racial groups (Roccas et al., 2008; for example, "Being a Black American is an important part of my identity"). Reliabilities for identification with Black, Hispanic, Asian, and White Americans were .98, .98, .98, and .94, respectively. We assessed affective reactions to different racial groups using 100-point thermometers (Wilcox et al., 1989). Participants learned that lower (higher) numbers indicate less (more) favorable feelings. They completed one thermometer for each of the four racial groups in a randomized order. We used four items to assess levels of prejudice toward Black Americans (Henry & Sears, 2002; e.g., "Black Americans are getting too demanding in their push for equal rights," $\alpha = .92$). We assessed empathy toward Black Americans using four items (Selvanathan et al., 2018). Participants reported how much they feel certain emotions (e.g., compassion, concern) when they think about the inequality that Black people have faced in America using scales ranging from 1 = *not at all* to 7 = *extremely* for each emotion ($\alpha = .96$).

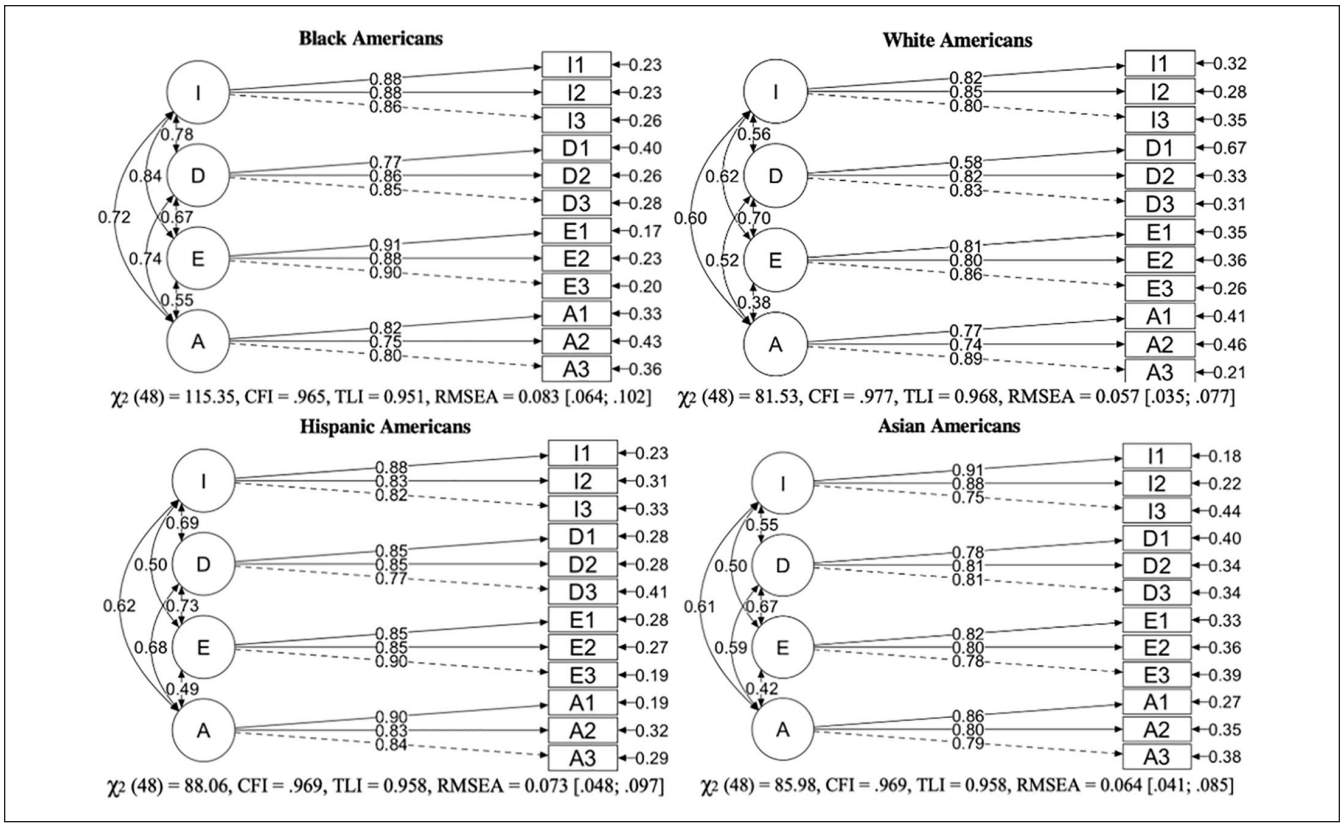

Figure 2. Coefficients From a Multi-Group Confirmatory Factor Analysis and Model Fit Indices by Racial Group (Study 2).
Note. I = impact mindset, D = dependency mindset, E = egocentric mindset, A = altercentric mindset.

Finally, given that analysis of the Wave 1 data pointed to the importance of impact mindset, in designing data collection for Wave 2 we sought to examine how another measure that is closely related to an impact mindset (derived from another theoretical perspective) would relate to support for BLM. To do so, we used four items taken from measures of self-efficacy in the context of social movements (two items each adapted from De Cremer & Van Dijk, 2002 and Van Zomeren et al., 2010; for example, "My decision to engage with BLM will make a difference for the success of the movement" and "I believe that my actions can influence the success of Black Lives Matter"; $\alpha = .94$). Note that an impact mindset captures propensity to think about how one is influencing others, whereas self-efficacy here captures the belief that one has considerable influence over others. This conceptual difference notwithstanding, finding similar associations between each of these measures and support for BLM would lend support to the importance of thinking about one's impact on others in explaining social movement participation.

Results

Table 2 reports descriptive statistics and pairwise comparisons by race across both waves of Study 1. Lending support to H1, an analysis of variance (ANOVA) found a significant effect of participant race on support for BLM at Wave 1, $F(3, 771) = 7.19$, $p < .001$, $\eta^2 = 0.03$, and Wave 2, $F(3, 452) = 2.69$, $p = .046$, $\eta^2 < .001$. Lending support to H2a, an ANOVA found a significant effect of participant race on egocentric mindset at Wave 1, $F(3, 771) = 12.90$, $p < .001$, $\eta^2 = 0.05$, and Wave 2, $F(3, 452) = 6.25$, $p < .001$, $\eta^2 < .001$. As Table 2 shows, during both waves, Black participants scored significantly higher than non-Black participants on this mindset. Lending support to H2b, an ANOVA found a significant effect of participant race on dependency mindset at Wave 1, $F(3, 771) = 9.86$, $p < .001$, $\eta^2 = 0.04$, and Wave 2, $F(3, 452) = 8.69$, $p < .001$, $\eta^2 = .004$. As Table 2 shows, in Wave 1, Black participants scored significantly higher than non-Black participants on this mindset. In Wave 2, Black participants scored significantly higher on this mindset as compared with Hispanic and White participants, whereas Asian participants did not significantly differ from any other group. Participant race did not influence impact mindset in Wave 1, $F(3, 771) = 1.26$, $p = .286$, or Wave 2, $F(3, 452) = 1.39$, $p = .245$. Participant race did not influence the altercentric mindset in Wave 1, $F(3, 771) = 2.07$, $p = .103$, but did significantly influence it in Wave 2, $F(3, 452) = 3.72$, $p = .012$, $\eta^2 = .007$, with Black participants

Table 2. Descriptive Statistics and Pairwise Comparisons of Mindsets and Support for BLM by Race (Study 1).

	Wave 1 (N = 775)			
	Black Americans (n = 191)	Hispanic Americans (n = 172)	Asian Americans (n = 194)	White Americans (n = 218)
1. Support for BLM	1.83 (0.90)$_a$	1.52 (0.61)$_b$	1.57 (0.70)$_b$	1.56 (0.71)$_b$
2. Impact	5.32 (1.44)$_a$	5.04 (1.44)$_a$	5.23 (1.22)$_a$	5.24 (1.43)$_a$
3. Dependency	5.16 (1.47)$_a$	4.47 (1.50)$_b$	4.76 (1.34)$_b$	4.44 (1.56)$_b$
4. Egocentric	5.70 (1.26)$_a$	5.04 (1.36)$_b$	5.05 (1.31)$_b$	4.93 (1.53)$_b$
5. Altercentric	4.90 (1.53)$_a$	4.82 (1.42)$_a$	5.02 (1.22)$_a$	4.68 (1.46)$_a$
	Wave 2 (N = 456)			
	Black Americans (n = 95)	Hispanic Americans (n = 108)	Asian Americans (n = 118)	White Americans (n = 135)
1. Support for BLM	1.63 (0.82)$_a$	1.45 (0.58)$_{a,b}$	1.43 (0.68)$_{a,b}$	1.38 (0.54)$_b$
2. Impact	5.19 (1.48)$_a$	4.87 (1.42)$_a$	4.81 (1.27)$_a$	4.94 (1.43)$_a$
3. Dependency	4.95 (1.42)$_a$	4.10 (1.70)$_b$	4.48 (1.40)$_{a,b}$	4.02 (1.42)$_b$
4. Egocentric	5.50 (1.45)$_a$	4.77 (1.66)$_b$	4.93 (1.33)$_b$	4.68 (1.57)$_b$
5. Altercentric	4.78 (1.49)$_a$	4.50 (1.39)$_{a,b}$	4.56 (1.38)$_{a,b}$	4.17 (1.39)$_b$

Note. Values in each cell represent means (*SD*s). Within each wave, means in the same row with different subscripts differ at $p < .05$, with a Bonferroni correction for multiple comparisons. BLM = Black Lives Matter.

Table 3. Multiple Regression Analyses Explaining Support for Black Lives Matter in Wave 1 and 2 (Study 1).

	Wave 1 (N = 775)			
	Black Americans (n = 191)	Hispanic Americans (n = 172)	Asian Americans (n = 194)	White Americans (n = 218)
1. Impact	.16*	.20***	.18***	.15***
2. Dependency	.01	.03	.04	−.09*
3. Egocentric	.00	−.07	−.02	.08
4. Altercentric	.03	−.02	.04	.04
F value	4.39**	9.74***	7.77***	8.38***
Adjusted R^2	.067	.170	.123	.120
	Wave 2 (N = 456)			
	Black Americans (n = 95)	Hispanic Americans (n = 108)	Asian Americans (n = 118)	White Americans (n = 135)
1. Impact	.17*	.15***	.13*	.12**
2. Dependency	−.02	−.07	–.01	−.01
3. Egocentric	.02	.04	.04	−.05
4. Altercentric	.06	.03	.07	.06
F value	3.86**	4.95**	4.58**	5.98***
Adjusted R^2	.109	.129	.109	.129

Note. Values represent standardized coefficients ().
*$p < .05$. **$p < .01$. ***$p < .001$.

scoring higher than White participants (and Hispanic and Asian participants not significantly different from either Black or White participants; see Table 2).

To test H3, we conducted a series of multiple regression models that used the four mindsets to explain support for BLM, with and without adjusting for our other measured variables. As Table 3 shows, across both waves, impact mindset was the only significant predictor of support for BLM among all four racial groups.

In Wave 2, we collected data on many other variables relevant to strategic thinking and support for BLM and used these variables in additional multiple regression analyses

Table 4. Multiple Regression Analyses Predicting Support for Black Lives Matter With and Without Control Variables Related to Engagement With Social Causes (Study 1, Wave 2).

	Entire sample			
	Model 1	Model 2	Model 3	Model 4
1. Impact	.15***	.12***	.09**	.05#
2. Dependency	−.03	−.03	−.03	−.03
3. Egocentric	.002	.02	.01	.02
4. Altercentric	.06*	.04	.02	.02
5. Self-interest		.0005	.01	−.01
6. Other-interest		.10***	.09***	.06*
7. Identification with Black Americans			.04	.008
8. Identification with Hispanic Americans			.04	.03
9. Identification with Asian Americans			.02	.007
10. Identification with White Americans			.0003	.003
11. Prejudice toward Black Americans			−.009	.01
12. Empathy toward Black Americans			.06*	.02
13. Belief in personal impact (self-efficacy)				.16***
14. Hispanic	−.14	−.13	−.07	−.17
15. Asian	−.14	−.14#	.009	−.10
16. White	−.19*	−.21*	−.003	−.11
F value	11.22***	11.27***	8.06**	11.60***
Adjusted R^2	.136	.169	.189	.272

Note. $N = 456$. Values represent standardized coefficients ($\hat{\beta}$). Black Americans set as the reference group for race.
#$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

(see Table 4). Wave 2 included many more control variables for which we adjust, and fewer participants, especially when analyzing within each racial group separately. To have sufficient statistical power in the most comprehensive models (with 16 predictors), we report analyses for the entire sample in Wave 2 with dummy coded variables for participant race. We ran one model where we used only the IDEA mindsets to predict support for BLM (Table 4, Model 1). We subsequently ran a model where we adjusted for self-interest and other-interest (Table 4, Model 2), before running a model with all other control variables including identification with different racial groups and empathy toward Black Americans (Table 4, Model 3). In all of these models, impact mindset retained its predictive value, though we saw that other interest was also a significant predictor in both models, consistent with the role of empathy in prosocial behavior.

Finally, we examined the explanatory value of impact mindset when using both impact mindset (i.e., thinking about how one's actions influence others' outcomes) and self-efficacy (i.e., believing that one has substantial influence on others' outcomes) together in the model — the three item index from the STS and the measure of self-efficacy in the context of social movements (Table 4, Model 4). Here, we see that self-efficacy in the context of social movements is a significant predictor of support for BLM, and that impact mindset is a marginally significant predictor. Thus, believing that one has substantial influence over others' outcomes (the movement's success) supersedes merely thinking about how one influences others' outcomes. Together, these multiple regression analyses shed light on the importance of considering one's impact on others in social movement participation.

When we examined Wave 1 and Wave 2 data cross-sectionally, it was clear that impact mindset explained a significant proportion of the variance in support for BLM at each time point. To capitalize upon our longitudinal data, we ran a serial mediation analysis to examine whether impact mindset explained both short-term and long-term support for BLM. This approach aligns with previous work in the intergroup relations and prejudice literature (e.g., Asbrock et al., 2010; Wagner et al., 2008), which has made use of serial mediation and structural equation modeling to illuminate the self-reinforcing nature of attitudes and behavior over time. This serial mediation allowed us to test the hypothesis that impact mindset explains long-term support for BLM, through two pathways: (a) by facilitating behavioral support for BLM in Wave 1 and (b) by facilitating an impact mindset in Wave 2. Analyses with and without covariates had equivalent levels of significance along each pathway of the model (see Figure 3 for the analysis without covariates; see OSM for an analysis adjusting for other IDEA mindsets as covariates). Taken together, these analyses indicate that an impact mindset in Wave 1 explains both short-term support for BLM as well as long-term support for BLM.

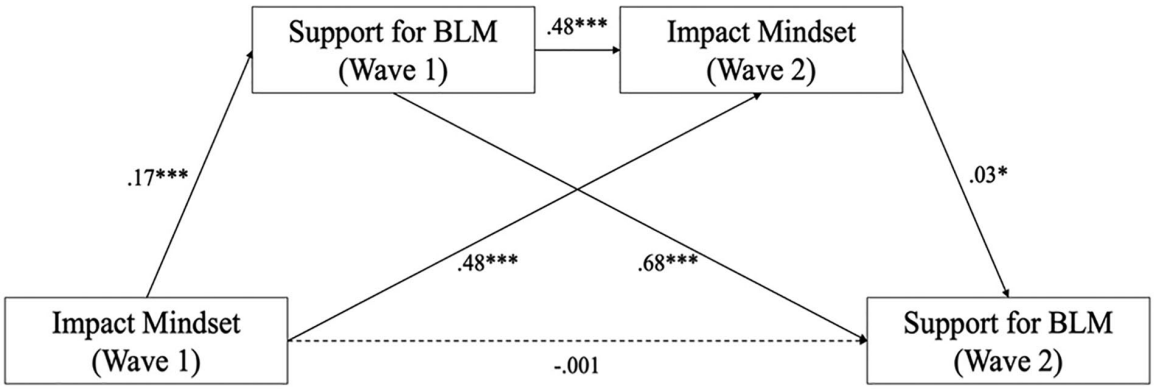

Figure 3. Serial mediation analysis linking impact mindset and support for Black Lives Matters across Waves 1 and 2 (Study 1).
Note. Smallest $N = 456$. *$p < .05$. ***$p < .001$. Numbers represent standardized coefficients. The direct X to Y path is nonsignificant, $p = .97$.

Discussion

Study 1 found support for H1 to H3. Black participants showed higher levels of behavioral support (H1) and scored significantly higher on egocentric (H2a) and dependency (H2b) mindsets when thinking about BLM relative to non-Black participants. These between-group differences in mindsets and mean levels of support notwithstanding, we found that an impact mindset explained support for BLM across all racial groups better than other mindsets (H3). These findings suggest that in-group advocacy, out-group solidarity, minority allyship, and majority allyship reflect similar decision-making processes that focus on one's ability to impact others' outcomes. Our longitudinal design in Study 1 enabled us to show that affect mindset measured in Wave 1 explains behavioral support for BLM 7 months later through two complementary pathways—by shaping behavioral support in Wave 1 as well as impact mindset in Wave 2. Furthermore, impact mindset retained its explanatory power when adjusting for a host of participant attitudes and characteristics. Some of the weaker effects in Wave 2 may reflect the reduced variance of behavioral support for BLM that accompanied the overall reduction in the frequency and scope of BLM activities and protests in spring 2021 relative to summer 2020. It may also reflect the partial conceptual overlap of the impact mindset with other-interest and self-efficacy in the context of social movements, two of the many control variables for which we adjusted in Wave 2.

Study 2: Strategic Thinking and Behavioral Intentions to Support BLM

Study 1 focused on past support for BLM during a particularly tumultuous period (June–September 2020), characterized by country-wide protests focusing on demands for racial justice. Individuals who have not engaged with the BLM movement in the past may nonetheless intend to support it in the future. Therefore, Study 2 tested our hypotheses focusing on participants' intentions to support BLM.[2]

Method

Participants. Data collection in Wave 1 took place between October 22, 2020 and October 23, 2020. We opened the study to 800 participants on Prolific and recorded a total of 918 observations. Following our preregistration, we excluded observations from participants who attempted to take the study multiple times ($n = 29$), did not self-identify as Black, Hispanic, Asian or White Americans ($n = 12$), or were non-U.S. citizens ($n = 1$) or residents ($n = 5$). In addition, 96 observations came from participants who left the survey prior to completing the main measures of interest, resulting in a final Wave 1 sample of 775 participants (gender: 47.4% male, 51.1% female, 1.5% nonbinary/other; age: $M = 29.8$, $SD = 10.8$; race: 28.0% White/Caucasian, 26.5% Black/African American, 20.3% Hispanic/Latinx, 25.3% Asian/Asian American).

Data collection in Wave 2 took place between May 4, 2021 and June 24, 2021. We invited back all 775 participants to complete Wave 2 and recorded 501 observations (64.6% retention rate). We excluded observations from participants who attempted to take the study multiple times ($n = 6$) or failed the attention check ($n = 38$). In addition, seven participants left the survey before completing the main measures of interest, resulting in a final Wave 2 sample of 450 participants (gender: 46.9% male, 51.8% female, 1.3% nonbinary/other; age: $M = 31.1$, $SD = 11.6$; race: 30.7% White/Caucasian, 23.1% Black/African American, 20.0% Hispanic/Latinx, 26.2% Asian/Asian American).

Procedures and measures for Wave 1. Participants completed the STS as in Study 1. Reliabilities for the four IDEA mindsets were .88, .84, .89, and .85, respectively (see OSM for reliabilities of the IDEA mindsets by racial group; see Figure 2 and the OSM for confirmatory factor analysis (CFA) results concerning the measurement equivalence across racial groups). Participants then completed our measure of behavioral intentions to support BLM:

Table 5. Descriptive Statistics and Pairwise Comparisons of IDEA Mindsets and Support for BLM by Race (Study 2).

	Wave 1 (N = 775)			
	Black Americans (n = 205)	Hispanic Americans (n = 156)	Asian Americans (n = 196)	White Americans (n = 217)
1. Support for BLM	$3.98\ (1.91)_a$	$3.32\ (1.81)_b$	$3.35\ (1.50)_b$	$3.44\ (1.75)_b$
2. Impact	$4.95\ (1.61)_a$	$4.70\ (1.60)_a$	$4.82\ (1.33)_a$	$4.94\ (1.46)_a$
3. Dependency	$4.62\ (1.60)_a$	$4.18\ (1.57)_b$	$4.25\ (1.30)_{a,\,b}$	$4.06\ (1.43)_b$
4. Egocentric	$5.33\ (1.62)_a$	$4.89\ (1.60)_b$	$4.78\ (1.41)_b$	$4.72\ (1.43)_b$
5. Altercentric	$4.54\ (1.50)_a$	$4.22\ (1.57)_a$	$4.37\ (1.34)_a$	$4.33\ (1.36)_a$
	Wave 2 (N = 450)			
	Black Americans (n = 104)	Hispanic Americans (n = 90)	Asian Americans (n = 118)	White Americans (n = 138)
1. Support for BLM	$3.41\ (1.02)_a$	$3.23\ (1.92)_a$	$3.09\ (1.49)_a$	$3.20\ (1.70)_a$
2. Impact	$5.06\ (1.53)_a$	$4.85\ (1.61)_a$	$4.87\ (1.16)_a$	$5.05\ (1.42)_a$
3. Dependency	$4.85\ (1.67)_a$	$4.19\ (1.67)_b$	$4.21\ (1.29)_b$	$4.17\ (1.54)_b$
4. Egocentric	$5.37\ (1.54)_a$	$4.61\ (1.66)_b$	$4.97\ (1.33)_{a,\,b}$	$4.83\ (1.49)_b$
5. Altercentric	$4.52\ (1.71)_a$	$4.44\ (1.58)_a$	$4.46\ (1.23)_a$	$4.63\ (1.35)_a$

Note: Values in each cell represent means (*SD*s). Within each wave, means in the same row with different subscripts differ at $p < .05$, with a Bonferroni correction for multiple comparisons. BLM = Black Lives Matter.

> Think about the next three months. The following questions focus on your intentions to engage with the social movement Black Lives Matter. Please indicate how likely you are to engage in each of the following behaviors during the next three months.

Participants reported how likely they are to engage in each behavior, using scales ranging from 1 = *extremely unlikely* to 7 = *extremely likely*. The behaviors, which were presented in randomized order for each participant, were the same as in Study 1 (α = .96). Participants then reported their demographic characteristics and exited the survey.

Procedures and measures for Wave 1. Participants completed exactly the same Wave 2 measures from Study 1, including: self-interest (α = .82); other-interest (α = .90); identification with Black (α = .98), Hispanic (α = .98), Asian (α = .97), and White Americans (α = .93); affective reactions to Black, Hispanic, Asian, and White Americans (single-item thermometers); prejudice toward Black Americans (α = .91); empathy toward Black Americans (α = .95); and self-efficacy in the context of social movements (α = .95). Participants then completed the STS (α = .91, .90, .89, and .91, for the four IDEA mindsets, respectively) and the measure of intentions to support BLM as in Wave 1 (α = .96).

Results

Table 5 reports descriptive statistics and pairwise comparisons by race across both waves of data collection. Lending partial support to H1, an ANOVA found a significant effect of participant race on intentions to support BLM at Wave 1, $F(3, 771) = 6.09$, $p < .001$, $\eta^2 = 0.02$, but not at Wave 2, $F(3, 446) = 0.65$, $p = .59$. As Table 5 shows, Black participants showed significantly stronger intentions to support BLM than non-Black participants in Wave 1. In contrast, in Wave 2, which took place several months after the height of the protests of summer 2020, members of different racial groups expressed similar levels of intentions to support BLM.

Lending support to H2a, an ANOVA found a significant effect of participant race on egocentric mindset at Wave 1, $F(3, 771) = 6.83$, $p < .001$, $\eta^2 = 0.03$, and at Wave 2, $F(3, 446) = 4.45$, $p = .004$, $\eta^2 < .001$. As Table 5 shows, during both waves, Black participants scored significantly higher on this mindset as compared with members of other racial groups (with the exception of Asian Americans in Wave 2). Lending support to H2b, an ANOVA found a significant effect of participant race on dependency mindset at Wave 1, $F(3, 771) = 5.52$, $p < .001$, $\eta^2 = 0.02$, and Wave 2, $F(3, 446) = 4.95$, $p = .002$, $\eta^2 < .001$. As Table 5 shows, in Wave 1, Black participants scored significantly higher on this mindset as compared with Hispanic and White (but not Asian) participants. Participant race did not influence impact mindset scores in Wave 1, $F(3, 771) = 1.04$, $p = .37$, or Wave 2, $F(3, 446) = 0.68$, $p = .57$. Similarly, participant race did not influence altercentric mindset scores in Wave 1, $F(3, 771) = 1.60$, $p = .19$, or Wave 2, $F(3, 446) = 0.43$, $p = .73$.

To test H3, we conducted a series of multiple regression analyses that used the four mindsets to explain support for BLM, with and without adjusting for our other measured variables. As Table 6 shows, in Wave 1, impact mindset significantly explained intentions to support BLM among

Table 6. Multiple Regression Analyses Explaining Support for Black Lives Matter During Waves 1 and 2 (Study 2).

	Wave 1 (N = 775)			
	Black Americans (n = 205)	Hispanic Americans (n = 157)	Asian Americans (n = 196)	White Americans (n = 217)
1. Impact	.46***	.39***	.39***	.62***
2. Dependency	.13	−.21	–.17	−.06
3. Egocentric	−.08	−.07	–.04	−.15
4. Altercentric	.07	.19	.21*	.01
F value	13.56***	5.33***	9.27***	13.95***
Adjusted R^2	.198	.100	.145	.193
	Wave 2 (N = 450)			
	Black Americans (n = 104)	Hispanic Americans (n = 90)	Asian Americans (n = 118)	White Americans (n = 138)
1. Impact	.29	.55**	.30*	.68***
2. Dependency	−.20	.04	−.14	−.16
3. Egocentric	.17	−.03	−.03	−.06
4. Altercentric	.43**	.28	.48***	.29**
F value	12.16***	16.84***	9.64***	19.95***
Adjusted R^2	.302	.416	.228	.356

Note. Values represent standardized coefficients ($\hat{\beta}$).
*$p < .05$. **$p < .01$. ***$p < .001$.

members of all racial groups. Interestingly, altercentric mindset also explained intentions to support BLM among Asian Americans. Somewhat surprisingly, impact mindset explained intentions to support BLM among Hispanic, Asian, and White Americans, but not among Black Americans, in Wave 2. In addition, altercentric mindset significantly explained intentions to support BLM among Black, Asian, and White Americans. These differences between Waves 1 and 2 may be due to the overall reduction in the nature, frequency and scope of BLM activities between the height of the protests in the summer of 2020 (Wave 1) and the spring of 2021 (Wave 2).

In Wave 2, we ran additional multiple regression analyses while adjusting for other variables relevant to strategic thinking and support for BLM (see Table 7). Mirroring our analyses from Study 1, we explored a model where we used only the IDEA mindsets to predict support for BLM (Table 7, Model 1), a model where we controlled for self-interest and other-interest (Table 7, Model 2), and a model with all other control variables including identification with different racial groups and empathy toward Black Americans (Table 7, Model 3). Replicating our findings from Study 1, impact mindset retained its predictive value in all of these models, and other-interest also emerged as a significant predictor.

Finally, we examined the explanatory value of impact mindset while also considering individuals' beliefs that their actions have substantial impact on others' outcomes (i.e., the measure of self-efficacy in the context of social movements; Table 7, Model 4). In this model, we see that self-efficacy in the context of social movements is a significant predictor of support for BLM, while impact mindset also retains its significance. When thinking about one's future intentions to support the BLM movement, it appears that believing one has substantial influence over others' outcomes (the movement's success) and thinking about how one influences others' outcomes are distinct predictors of future intentions. Together, these findings indicate that empathy for others and thinking about how much one influences others' outcomes helps explain behavioral intentions to support a social movement.

Finally, we ran a serial mediation analysis parallel to Study 1's, examining whether impact mindset explains both short-term and long-term intentions to support BLM. As Figure 4 shows, and replicating Study 1's findings, impact mindset in Wave 1 predicted short-term intentions to support BLM as well as long-term intentions to support BLM through two pathways—by explaining support for BLM in Wave 1 and by explaining impact mindset in Wave 2. Once again, analyses with and without covariates had equivalent levels of significance along each pathway of the model (see Figure 4 for analysis without covariates; see OSM for analysis adjusting for other IDEA mindsets as covariates).

Discussion

Study 2 replicated the main findings of Study 1 by showing that, in Wave 1, intentions to support BLM, as well as egocentric and dependency mindsets, were significantly higher among Black Americans than among members of other racial

Table 7. Multiple Regression Analyses Predicting Intentions to Support Black Lives Matter With and Without Control Variables Related to Engagement With Social Causes (Study 2, Wave 2).

	Entire sample			
	Model 1	Model 2	Model 3	Model 4
1. Impact	.49***	.42***	.28***	.12*
2. Dependency	−.12#	−.11#	−.03	.001
3. Egocentric	.002	.02	−.004	−.007
4. Altercentric	.35***	.30***	.21***	.11*
5. Self-interest		−.05	.03	−.04
6. Other-interest		.31***	.15**	.06
7. Identification with Black Americans			.14*	.06
8. Identification with Hispanic Americans			.07	.04
9. Identification with Asian Americans			.09	.07
10. Identification with White Americans			.12*	.07
11. Prejudice toward Black Americans			−.17**	−.12*
12. Empathy toward Black Americans			.31***	.18**
13. Belief in personal impact (self-efficacy)				.53***
14. Hispanic	−.12	−.03	.58	.35
15. Asian	−.28	−.09	.67	.30
16. White	−.32#	−.22	.48	.27
F value	33.17***	30.76***	29.20***	45.02***
Adjusted R^2	.334	.374	.485	.611

Note. $N = 450$. Values represent standardized coefficients ($\hat{\beta}$). Black Americans set as the reference group for race.
#$p < .10$.*$p < .05$. **$p < .01$. ***$p < .001$.

groups, thereby lending support to H1, H2a, and H2b. These patterns were no longer evident several months after the unparalleled protests of summer 2020, in Wave 2, when intentions to support BLM dropped among Black Americans to the same level observed among members of other racial groups. Study 2 also replicated Study 1's findings by showing the importance of impact mindset for intentions to support BLM across racial groups, both in the short-term and in the long-term. Although Study 2's findings for the altercentric mindset, especially in Wave 2, deviate from Study 1's findings, they are consistent with the results of our second pilot study described earlier (see OSM for details), which found positive and significant associations between impact and altercentric mindsets and prosocial interpersonal orientations.

The magnitude of the associations between impact mindset and intentions to support BLM, as well as the overall proportion of the variance in intentions to support BLM that was explained by the four IDEA mindsets, were noticeably larger in Study 2 when compared to the associations between impact mindset and past behavioral support of BLM in Study 1. Future research may examine directly whether the IDEA mindsets explain future decisions better than past decisions.

General Discussion

The psychological forces that tie individuals to their ingroups are naturally stronger than those that tie them to outgroups. This fact helps explain why Black Americans showed stronger support for BLM, and scored significantly higher on egocentric and dependency mindsets in the context of BLM, than members of other racial groups (particularly in Wave 1). These patterns notwithstanding, the current research documents the power of an impact mindset to shape support for a social movement across group boundaries and over time. Across past support and intentions for future support, and regardless of whether support for BLM took the form of ingroup allyship, out-group solidarity, minority allyship, or majority allyship, we found that impact mindset played an important role in explaining support for racial justice. Moreover, impact mindset influenced both short-term and long-term support for BLM, through its effects on behavioral support in Wave 1 and impact mindset in Wave 2. Although the struggle for racial justice has different meanings and implications for Black, Hispanic, Asian, and White Americans in the U.S., it seems that a similar mindset focused on impact shapes decisions to support BLM.

Theoretical and Practical Implications

This article makes four contributions to the literatures on social movements, intergroup relations, and strategic thinking and choice. A key question in the literature on social movements concerns the factors that explain successful mobilization of individuals to participate in collective action. Previous research has underscored the roles that social identities, group-based moral emotions, and ideological worldviews

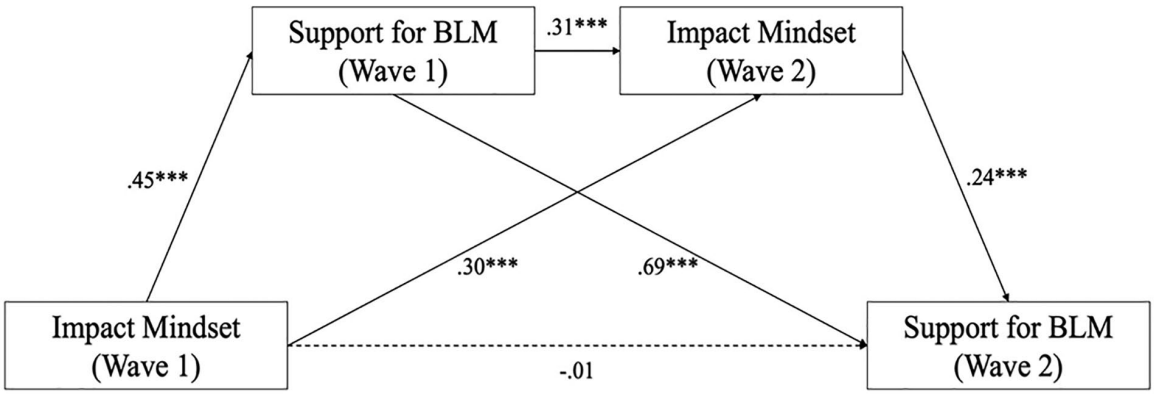

Figure 4. Serial mediation analysis linking impact mindset and support for Black Lives Matters across Waves 1 and 2 (Study 2).
Note. Smallest $N = 450$. $^{*}p < .05$. $^{***}p < .001$. Numbers represent standardized coefficients. The direct X to Y path is nonsignificant, $p = .78$.

play in shaping participation in collective action (e.g., Ilchi & Frank, 2020; Klavina & van Zomeren, 2020; Osborne et al., 2019; Selvanathan et al., 2020). We acknowledge the importance of these antecedents of individual participation in collective action. At the same time, theoretically integrating the literatures on social movements and social decision-making has the potential to enrich prevailing explanations of social movement participation.

Second, by identifying both differences and commonalities between Black, Hispanic, Asian, and White Americans' thinking about and support for BLM, the current research enhances our understanding of how BLM as a social movement potentially shapes both intra-minority as well as majority-minority relations between racial groups. Specifically, our findings suggest that for Black Americans, the decision to support BLM brings to mind agency and empowerment on one hand (egocentric mindset), and interdependence with and vulnerability to the actions of others on the other hand (dependency mindset). Our findings also reveal that the common "language" that binds together members of different racial groups in fighting for racial justice revolves around impact—thinking about how our actions shape the outcomes that others experience. Previous research has shown that thinking about our positive impact has emotional benefits (Aknin et al., 2013). The current research shows that an impact mindset also explains who joins the fight for social change.

Third, the current research elucidates the multidimensional nature of strategic thinking and illuminates the relevance of different mindsets (elsewhere labeled dimensions of strategic thinking) for explaining prosocial behavior in group and intergroup contexts (Halevy, 2016, 2020). Whereas prevailing conceptualizations of strategic thinking emphasize the competitive nature of this mental process, the current research shows that some mindsets can explain individual decisions to engage in costly prosocial behavior associated with fighting for racial justice. Linking distinct mindsets at the level of the individual decision-maker to prosocial behavior in the context of social movements can pave new directions for research on individual participation in collective action.

The current research also helps refine the conceptualization of the four IDEA mindsets. Specifically, the pattern of associations between the IDEA mindsets and other constructs assessed in this research provides compelling evidence that the IDEA framework is conceptually distinct and empirically distinguishable from prior conceptualizations of self-interest and other-interest. *Theoretically*, the distinction is that the IDEA mindsets consider both who is taking the action and who is experiencing the outcome. Thus, for example, an egocentric mindset captures more than one's motivated preference for better outcomes over worse outcomes. Specifically, it captures an agentic way of approaching decisions whereby an individual thinks about how they can shape their outcomes through their actions. Along similar lines, our main construct of interest here—impact mindset—captures thinking about how one's actions shape others' outcomes, which is meaningfully different from simply wishing others well. *Empirically*, the findings we report in our pilot studies (see OSM) clearly differentiate the IDEA mindsets from self-enhancement and self-transcendence values (S. H. Schwartz, 1992), social value orientations (Van Lange et al., 1997), maximization orientation (B. Schwartz et al., 2002), as well as several other-oriented mindsets and skills (empathetic concern, communal orientation, and interdependent self-construal). Therefore, the theoretical ideas and empirical evidence reported in this paper help elucidate the meaning of this multidimensional model of strategic thinking and distinguish it from other epistemic and social orientations.

Finally, the current research also has potential implications for inter-minority cooperation. It is notable that of the four mindsets studied here, the impact mindset was the only one that predicted real-world behavior. Indeed, results from a supplementary study (see OSM) indicate a variety of misperceptions with regard to what motivates others to engage with

BLM, the most striking being the extent to which non-Black Americans overestimate the role of egocentric and dependency mindsets in shaping Black Americans' support for BLM. These misperceptions, and their potential downstream consequences, suggest that minority groups could benefit from greater communication as a means to correct erroneous beliefs that some minority group members focus primarily on improving their own outcomes rather than on positively affecting others. This provides a fruitful avenue for future research. Perhaps most importantly, our findings show that Hispanic and Asian Americans are more likely to coalesce with Black Americans to promote racial justice when thinking with an impact mindset (and to some extent also with an altercentric mindset). Hence, efforts to mobilize collective action across racial groups should focus on promoting an impact mindset.

Strengths, Limitations, and Future Directions

The current research offers several notable advances relative to previous research on intergroup relations, including the simultaneous consideration of the perspectives of Black, Hispanic, Asian, and White Americans; the use of highly powered, longitudinal studies; and the theoretical integration of literatures characterized by little cross-communication to address a significant and timely societal issue. However, like all research, ours is not without limitations. Here, we underscore two potential shortcomings that provide promising directions for future research.

First, our studies used correlational designs to explain behavioral support of BLM. Therefore, one way in which future research can advance knowledge in this space is to employ experimental designs to demonstrate causal effects of an impact mindset on individual participation in collective action. One notable challenge with pursuing such a future direction has to do with the positive associations among the four mindsets observed in our studies. Hence, it may be quite challenging to ask an individual to think about how their actions influence others' outcomes but not their own personal outcomes (i.e., activating an impact mindset while at the same time effectively blocking an egocentric mindset).

Second, whereas our studies consistently show the power of thinking about impact, we acknowledge that individuals may be thinking about different kinds of "others" when thinking about their impact on others. Our supplementary study found that, when thinking about "others" in the context of BLM, most participants considered Black Americans and all Americans (see OSM). Future research may use experimental designs to systematically manipulate the identity of the beneficiaries that individuals consider when choosing to support a social movement.

Conclusion

Anecdotal evidence suggests that different motives can underlie the choice to fight for social change in general, and for racial justice in particular. As former U.S. President Barack Obama noted, a cardinal distinction can be drawn in this regard between self-focused and other-focused thinking. Reflecting on his past thinking, Obama (2020) wrote,

> I was almost forty, broke, coming off a humiliating defeat. . . Worse, I recognized that in running for Congress I'd been driven not by some selfless dream of changing the world, but rather by the need to justify the choices I had already made, or to satisfy my ego, or to quell my envy of those who had achieved what I had not. (p. 38)

Our work highlights the wisdom in Obama's insight, and the benefits of studying how ordinary citizens think about social change and their impact on others. The current research underscores the usefulness of applying a social decision-making lens to understand individual choices to fight for social change. Our research shows that thinking about impact is the common thread that connects Black, Hispanic, Asian, and White Americans in joint pursuit of racial justice in the United States.

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Supplemental Material

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Notes

1. Wave 1 of Study 1 was administered in September 2020, a time when the then-upcoming Presidential Election was particularly salient. To further illuminate the relations between mindsets and involvement in civic life, we also assessed participants' mindsets and engagement with national and local politics. The order in which participants responded to the BLM and politics measures was counterbalanced. The measures and findings pertaining to engaging with politics go beyond the focus of this article and are not discussed further.
2. We also examined in Study 2 the role of choice mindset in shaping decisions to support BLM, reasoning that mindsets may explain intentions to support BLM more when people construe such actions as a matter of personal choice (Savani et al., 2010). We randomly assigned participants to a choice or a no choice condition using a manipulation from Ma et al. (2019, Study 1). Participants in both conditions completed a measure of "life choice perceptions" as a manipulation check (Ma et al., 2019, Study 6; four items, e.g., "I have a great deal of choice over the events that happen in my life," 1 = strongly disagree to 7 = strongly agree, $\alpha = .79$). Despite the use of an established

procedure and measure in a highly powered study, the manipulation of choice mindset did not influence perceptions of choice in life, $t(771) = 0.01$, $p = .99$. We, therefore, collapsed across conditions in all subsequent analyses. Responses to the measure of perceived choices in life correlated positively with egocentric mindset, $r(771) = .19$, $p < .01$, but not with the other three mindsets, impact: $r(771) = .06$, $p = .08$; dependency: $r(771) = .07$, $p = .06$; altercentric: $r(771) = .05$, $p = .19$.

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