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COLLECTIVE AUTONOMY RESTRICTION: A THEORETICAL MODEL AND EMPIRICAL INVESTIGATIONS

Adrian Rivera-Rodriguez
University of Massachusetts Amherst

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**COLLECTIVE AUTONOMY RESTRICTION: A THEORETICAL MODEL AND
EMPIRICAL INVESTIGATIONS**

A Dissertation Presented

By

ADRIAN RIVERA-RODRIGUEZ

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

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Department of Psychological and Brain Sciences
Social Psychology

Collective Autonomy Restriction: A Theoretical Model and Empirical Investigations

A Dissertation Presented

By

ADRIAN RIVERA-RODRIGUEZ

Approved as to style and content by:

Nilanjana Dasgupta, Chair

Evelyn Mercado

Brian Lickel

Tatishe Nteta

Maureen Perry-Jenkins
Psychological and Brain Sciences

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ABSTRACT

COLLECTIVE AUTONOMY RESTRICTION: A THEORETICAL MODEL AND
EMPIRICAL INVESTIGATIONS

SEPTEMBER 2023

ADRIAN RIVERA-RODRIGUEZ, B.S., UNIVERSITY OF KANSAS

M.S., UNIVERSITY OF MASSACHUSETTS AMHERST

Ph.D., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Dr. Nilanjana Dasgupta

Collective autonomy refers to a group's freedom to define and practice their own cultural and social identity without interference from other groups. According to the "threat and defense" hypothesis of collective autonomy restriction, group members are motivated to defend their collective autonomy from outside restriction. However, the psychological processes that influence advantaged vs. disadvantaged group members' perceptions of collective autonomy, as well as the specific strategies they use to protect collective autonomy, have yet to be articulated. This dissertation presents three manuscripts that examine the social conditions and psychological processes that shape advantaged and disadvantaged group members' perceptions of collective autonomy. The first manuscript (Chapter 2) is a theoretical review that articulates hypotheses about the social conditions (i.e., stability vs. instability of a social hierarchy and its perceived legitimacy) and psychological process (i.e., social identity strength, system beliefs, social comparisons, and intergroup threat) that shape advantaged and disadvantaged group members' perceptions of collective autonomy restriction and drive collective action. The second

manuscript (Chapter 3) empirically tests whether social instability and hierarchy threat increases feelings of collective autonomy restriction among politically advantaged group members. Finally, the third manuscript (Chapter 4), empirically tests the external validity of the collective autonomy restriction literature by testing whether experiencing racial/ethnic collective autonomy shapes adolescents' perceptions of their teachers as supportive of their intrinsic motivational needs within the classroom context. A summary of each manuscript, as well as their theoretical and practical implications for future research are discussed (Chapter 5).

Table of Contents

	Page
ACKNOWLEDGEMENTS	iv
ABSTRACT.....	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
1. INTRODUCTION.....	1
Overview of Three Papers	4
2. WHEN SOCIAL HIERARCHY, POWER, AND COLLECTIVE AUTONOMY MOTIVATE SOCIAL MOVEMENT AND COUNTER-MOVEMENT MOBILIZATION AMONG DISADVANTAGED AND ADVANTAGED GROUPS	9
Abstract.....	9
Introduction.....	10
The Movement Mobilization Model of Collective Autonomy	12
Social Hierarchy and the Unequal Distribution of Power and Resources Leaves Disadvantaged Groups Vulnerable to Collective Autonomy Restriction	15
Under What Conditions Do Disadvantaged Groups Engage in Social Movements?	17
Social Movement Efficacy: Strategies to Empower Disadvantaged Groups.....	22
Advantaged Group Members’ Reactions to Social Movements and Hierarchy Instability	30
Perceiving Social Movements as Illegitimate Induces Intergroup Threat and Collective Autonomy Restriction	36
Perceived Restriction of Collective Autonomy Motivates Counter-Movement Mobilization to Preserve the Social Hierarchy	39
Conclusion	43
3. POLITICAL PARTISANSHIP SHAPES THE ASSOCIATION BETWEEN COLLECTIVE AUTONOMY RESTRICTION AND RESPONSES TO COVID-19 TO INFLUENCE HEALTH BEHAVIOR OVER TIME.....	47
Abstract.....	47
Introduction.....	48
Method	59
Results.....	63
Discussion.....	71
Supplemental Analysis.....	75

4. RACIAL/ETHNIC COLLECTIVE AUTONOMY RESTRICTION AND TEACHER FAIRNESS: PREDICTORS AND MODERTORS OF STUDENT’S PERCEPTIONS OF TEACHER SUPPORT	81
ABSTRACT.....	81
Introduction.....	82
Method	87
Results.....	90
Discussion.....	94
Supplemental Information	99
5. GENERAL DISCUSSION.....	103
Summary of Key Findings	103
Theoretical Implications of the MMCA	104
Hierarchy Instability and Perceptions of Collective Autonomy Restriction Among Advantaged Group Members: An Empirical Investigation	108
Racial/Ethnic Collective Autonomy Restriction at School: Replicating Theory in Applied Educational Contexts	110
Conclusions and Practical Implications	112
BIBLIOGRAPHY.....	116

LIST OF TABLES

	Page
Table 1. Demographic Information Measured at T1	60
Table 2. Correlations and Descriptive Statistics	63
Table 3. Regression Coefficients Predicting Perceptions of Political Collective Autonomy Restriction at T2 and T3.....	64
Table 4. Regression Coefficients Predicting Perceived Appropriateness of National Response to COVID-19, Moderated by Party Affiliation	66
Table 5. Regression Coefficients Predicting Perceived Threat from COVID-19 to the American Public, Moderated by Party Affiliation	67
Table 6. Pathway Coefficients for Parallel Moderated Mediation	70
Table 7. Group Means by Political Party and T-test Comparisons	77
Table 8. Parallel Mediation Moderated by Political Orientation	80
Table 9. Student Demographics	88
Table 10. Descriptive Statistics for Dependent Variables by Racial/Ethnic Identity	90
Table 11. Factor Loadings for Collective Autonomy Restriction and Intrinsic Motivation.....	100

LIST OF FIGURES

	Page
Figure 1. Movement Mobilization Model of Collective Autonomy (MMCA)	14
Figure 2. Moderated Parallel Mediation: Perceptions of COVID-19 Mediate the Link Between CAR and Health Behaviors.....	68
Figure 3. Collective Autonomy Restriction Mediates the Link Between Student Race/Ethnicity and Perceived Teacher Support.....	92
Figure 4. Moderated Mediation by Students' Past Experience with Fair Treatment from Teachers and Adults at School	94
Figure 5. Supplemental Analysis: Mediation via Teacher Support.....	102

CHAPTER 1

INTRODUCTION

All humans share a universal desire to feel in control of their behaviors, goals, and decisions (Deci & Ryan, 2000). Decades of research on self-determination has linked human motivation, affect, wellbeing, and action to individuals' ability to fulfill their need for *personal autonomy* (Deci & Ryan, 2008). Extending this to the intergroup realm, recent research has demonstrated that people also have a psychological need for autonomy at a *group* level (Kachanoff, 2017). This relatively new idea, coined *collective autonomy*, describes a group's desire to define and practice its own social identity without interference from other groups (Kachanoff, 2017; Kachanoff, Taylor, Caouette, Khullar, & Wohl, 2019; Kachanoff, Kteily, Khullar, Park, & Taylor, 2020). In turn, perceptions that one's collective autonomy is restricted has been shown to negatively impact psychological wellbeing, influence outgroup attitudes, and motivate behaviors that seek to reaffirm one's collective autonomy (Kachanoff et al., 2019, Kachanoff et al., 2020).

Concepts related to social hierarchy and group power are central to our understanding of whether and when individuals will feel that their collective autonomy is restricted (Kachanoff et al., 2022). According to the "threat and defense" hypothesis of collective autonomy (Kachanoff et al., 2022), societally disadvantaged groups are the most likely to experience collective autonomy restriction because they lack the power, resources, and social influence necessary to challenge structural factors that restrict them. By this account, advantaged group members should be less likely to experience collective autonomy restriction because of their group's privileged access to power, resources, and

social influence. However, preliminary research indicates that some advantaged individuals perceive their collective autonomy to be restricted despite belonging to objectively advantaged social groups (Boorstein & Pulliam Bailey, 2017; Kachanoff et al., 2019).

Most existing research on the “threat and defense” hypothesis focuses on disadvantaged group members’ perceptions of collective autonomy restriction and demonstrates significant evidence to support the hypothesis that societal inequality, which limits disadvantaged groups’ access to power and social influence, is linked to perceived collective autonomy restriction among disadvantaged individuals (Kachanoff et al., 2020; Keltner, Gruenfeld & Anderson, 2003; Pratto, 2016; Pratto, Pearson, Lee & Saguy, 2008). Significantly less attention has been given to advantaged group members’ experiences of collective autonomy restriction. As a result, the social conditions that might lead advantaged individuals to feel that their collective autonomy is restricted despite their group’s access to power and social influence, remains an open question.

Research on collective autonomy also tends to focus on the downstream consequences of collective autonomy restriction on beliefs, feelings, and behavior. For example, several experiments have shown that greater perceived collective autonomy restriction is associated with less feelings of personal autonomy, poorer psychological well-being, greater desire for group power, increased support for collective action, and hostile emotions towards outgroups that are perceived to be the agents of collective autonomy restriction (Kachanoff et al., 2019; Kachanoff et al., 2021; Kachanoff et al., 2020). Significantly less empirical research has articulated psychological processes and

individual differences that determine whether and when a person will feel that their collective autonomy is being restricted.

Finally, much of the collective autonomy literature involves cross-sectional laboratory experiments that examine the impact of collective autonomy restriction on motivation and behavior. Much more research is needed to examine how perceived collective autonomy restriction shapes motivation and behavior outside the laboratory and assess the extent to which laboratory analogs replicate in social contexts in the real world.

My dissertation comprises three manuscripts that aim to address these above-mentioned gaps in the collective autonomy literature. The first manuscript (Chapter 2) is a theoretical review that articulates hypotheses about the social conditions (i.e., stability vs. instability of social hierarchy and its perceived legitimacy) and psychological process (i.e., social identity strength, system beliefs, social comparisons, and intergroup threat) that shape advantaged and disadvantaged group members' perceptions of collective autonomy restriction and drive collective action. The second manuscript (Chapter 3) empirically tests whether social instability and hierarchy threat increases feelings of collective autonomy restriction among political group members in power, and whether feelings of the ingroup's autonomy being hemmed contributed to the political polarization of COVID-19 over time. Finally, the third manuscript (Chapter 4), another empirical study, examines collective autonomy restriction in the context of racial identity among K-12 students, and how it impacts students' perceptions of their teachers and academic achievement over time.

Overview of Three Papers

This dissertation presents three separate manuscripts that investigate the following research questions:

- 1) What are the societal conditions and psychological processes that shape advantaged and disadvantaged group members' perceptions of collective autonomy restriction and motivate the mobilization of social movements and counter-movements?
- 2) Did political conservatives feel greater collective autonomy restriction during the COVID-19 pandemic than liberals? Did these feelings, in turn, motivate political polarization of COVID-19 and opposition to public health mandates?
- 3) Are racial/ethnic minority high school students more likely to feel that their collective autonomy is restricted compared to their White peers? If so, what are the implications of experiencing collective autonomy restriction on their perceptions of teachers as supportive of their learning needs? What can teachers do to improve their relationships with students who feel that their racial/ethnic autonomy is restricted?

The first manuscript (Chapter 2) is a theoretical review that addresses the first set of research questions. By integrating the “threat and defense hypothesis” of collective autonomy (Kachanoff et al., 2022) with psychological and sociological theories, I articulate hypotheses about key factors that are likely to influence feelings of collective autonomy restriction and motivate the mobilization of social movements and counter-movements. I argue that the perception that the social hierarchy is impermeable and stable increases the feeling among disadvantaged individuals that their ingroup's

collective autonomy is restricted, motivating the mobilization of social movements to challenge social hierarchies that restrict them. Conversely, the perception of hierarchy instability coupled with the threat of losing one's privileged position within it increases perceptions of collective autonomy restriction among advantaged individuals and motivates them to mobilize counter-movements that seek to defend the existing status quo. I unify these hypotheses in a theoretical cyclical model that illustrates how advantaged and disadvantaged group members' perceptions of collective autonomy, hierarchy, and decisions to mobilize are influenced by one another. This manuscript is in revision at *Personality and Social Psychology Review* and is reproduced in this dissertation.

The second manuscript (Chapter 3) addresses the second set of research questions mentioned above and empirically tests the hypothesis that social instability and threat of losing one's political group advantage increases perceptions of collective autonomy restriction among people whose political party is in power. Using data from a longitudinal study conducted during the early months of the COVID-19 pandemic, I examined whether intrinsic factors associated with political conservatism – such as sensitivity to hierarchy threat and the desire for social dominance – made Republicans (the political party in power at the time) more likely to feel that their collective autonomy was restricted. Furthermore, I conducted a mediational model to test whether perceptions of collective autonomy restriction made political conservatives more likely to believe that COVID-19 was being used as a political tool to weaken the Republican party, and whether these beliefs, in turn, motivated the rejection of COVID-19 health and safety

guidelines among conservatives. This manuscript is currently under peer review at *Political Psychology* and is reproduced in this dissertation.

The third manuscript (Chapter 4) addresses the third set of research questions and examines collective autonomy restriction in the context of K-12 education. According to theories on intrinsic motivation, teachers promote students' academic motivation and performance by supporting their intrinsic need to feel *autonomous*, *competent*, and *socially connected* in the classroom (Deci & Ryan, 2000; Deci, Vallerand, Pelletier, & Ryan, 1991; Ginsberg & Wlodkowski, 2019; Williams & Deci, 1996). Integrating intrinsic motivation theories with the collective autonomy restriction framework, Chapter 4 examines whether feelings of collective autonomy restriction influence students' perceptions of their teacher as supportive of their intrinsic motivational needs. In testing this hypothesis, I first examined whether students of color (i.e., Black, Latinx, Asian, and multiracial) were more likely to experience collective autonomy restriction compared to their White peers. Then, I examined whether experiencing greater collective autonomy restriction mediated the link between students' racial/ethnic identity and perceptions of teacher support. Finally, I examined whether positive past experiences with teachers and adults moderated the association between collective autonomy restriction and teacher support. This manuscript is currently under review at *Frontiers in Education* and is reproduced in this dissertation.

Finally, a summary of each manuscript and their theoretical and practical implications for future research are discussed in Chapter 5. Here, I argue that my thesis adds to existing literature in three ways. First, the model I propose in my theoretical review (Chapter 2) extends the "threat and defense" hypothesis of collective autonomy by

proposing distinct social conditions and psychological processes that influence experiences of collective autonomy and motivate the mobilization of social movements and counter-movements, differently for advantaged and disadvantages group members. I also identify specific strategies that social movements and counter-movements use to challenge vs. preserve social hierarchy respectively and argue that the effectiveness of these movements exacerbate perceptions of collective autonomy restriction depending on whether they challenge vs. support social hierarchy. I also point to directions for future research that might directly test how social contexts and psychological factors influence perceptions of collective autonomy restriction as social movements and counter-movements unfold in real time.

Chapter 3 empirically tests the portion of my model laid out in Chapter 2 showing that social instability and hierarchy threat are important social conditions and psychological processes that drive feelings of collective autonomy restriction among advantaged group members. Specifically, I test whether social instability resulting from the COVID-19 pandemic (i.e., the social context) and political conservatives' sensitivity to hierarchy threat (i.e., the psychological process) exacerbated feeling of collective autonomy restriction among Republicans who were in political power at the time of this study and motivated them to reject COVID-19 health and safety guidelines.

Finally, Chapter 4 extends the external validity of the collective autonomy restriction literature by testing whether adolescents' perceptions of racial/ethnic collective autonomy restriction influence perceptions of their teachers' as supportive of their intrinsic motivational needs. Furthermore, in examining whether positive interactions with teachers in the past buffers the association between collective autonomy restriction

and perceptions of teacher support, Chapter 4 also highlights important factors that can inform future interventions that aim to protect vulnerable populations from the negative impacts of racial/ethnic collective autonomy restriction.

CHAPTER 2
WHEN SOCIAL HIERARCHY, POWER, AND COLLECTIVE AUTONOMY
MOTIVATE SOCIAL MOVEMENT AND COUNTER-MOVEMENT
MOBILIZATION AMONG DISADVANTAGED AND ADVANTAGED GROUPS

Abstract

What happens when disadvantaged group members try to gain power in an attempt to protect their collective autonomy? The present integrative review outlines dynamic social processes through which efforts to restrict a group's collective autonomy motivate social movement mobilization among disadvantaged groups to challenge social hierarchies that limit their power. This, in turn, threatens advantaged groups' perceptions of their access to power and, by extension, their sense of collective autonomy, motivating them to reaffirm the existing social hierarchy by mobilizing counter-movements. We propose a theoretical model, called the Movement Mobilization Model of Collective Autonomy Restriction, to illustrate these dynamic processes by integrating sociological, psychological, and organizational science literatures. The model articulates the conditions under which social movements and counter-movements are activated, psychological processes that drive action, how they play off each other, and offer directions for future research.

Introduction

All humans share a universal desire to feel in control of their behaviors, goals, and decisions (Deci & Ryan, 2000). Decades of research on self-determination has linked human motivation, affect, wellbeing, and action to individuals' ability to fulfill their need for *personal autonomy* (Deci & Ryan, 2008). Extending this to the intergroup realm, recent research has demonstrated that people also have a psychological need for autonomy at a *group* level (Kachanoff, 2017). This relatively new idea, coined *collective autonomy*, describes a group's desire to define and practice its own social identity without interference from other groups (Kachanoff, 2017; Kachanoff, Taylor, Caouette, Khullar, & Wohl, 2019; Kachanoff, Kteily, Khullar, Park, & Taylor, 2020).

According to the "threat and defense" hypothesis of collective autonomy, the desire to defend collective autonomy motivates group members to either challenge or protect the social hierarchy depending on their group's position within it (Kachanoff et al., 2022). For disadvantaged groups, less access to power, resources, and social influence leaves them vulnerable to policies, regulations, and social norms that sometimes restrict their ability to exercise their collective autonomy (Belsha, 2020; Kachanoff, 2017; Kachanoff, 2019; Kachanoff et al., 2020; Keltner, Gruenfeld & Anderson, 2003; Pratto, 2016; Pratto, Pearson, Lee & Saguy, 2008). As a result, perceived collective autonomy restriction has been shown to motivate disadvantaged groups to challenge social hierarchies that disenfranchise them (Kachanoff, 2019; Kachanoff et al., 2022). In comparison, advantaged groups that possess greater power, resources, and status are less likely to experience restrictions to their collective autonomy. However, research indicates some advantaged group members may believe that their group's collective autonomy is

restricted, despite their privileged position within the social hierarchy (Kachanoff et al., 2019). For them, perceived collective autonomy restriction has been shown to motivate the preservation of social hierarchy because it affords them privileged access to power, resources and social influence that can be leveraged to protect it (Kachnanoff et al., 2019; Kachanoff et al., 2022).

One way that disadvantaged groups can try and challenge social hierarchy is through social movement mobilization. Conversely, advantaged groups may seek to preserve social hierarchy through the mobilization of counter-movements. Thus the “threat and defense” hypothesis suggests that the desire to protect collective autonomy motivates the mobilization of social movements among disadvantaged groups, and counter-movements among advantaged groups (Kachanoff et al., 2019, Kachanoff et al., 2022). However, the “threat and defense” hypothesis does not distinguish between societal antecedents under which disadvantaged and advantaged group members collective autonomy is at risk of being restricted. Furthermore, it does not articulate the specific psychological processes that influence perceptions of collective autonomy restriction or drive group-based mobilization. The present review fills this gap by integrating the “threat and defense” hypothesis with psychological (i.e., social identity, relative deprivation, threat management, and intergroup threat) and sociological theories (i.e., hierarchy (in)stability, legitimacy, resource mobility, and network science) to identify conditions under which disadvantaged and advantaged group members experience collective autonomy restriction and participate in social movements or counter-movements. In doing so we hope to illustrate a cyclical process of social movement and counter-movement mobilization where advantaged and disadvantaged

group members' perception of collective autonomy, hierarchy, and decisions to mobilize, are influenced by one another. We call this cyclical process model the Movement Mobilization Model of Collective Autonomy (MMCA, see Figure 1).

The Movement Mobilization Model of Collective Autonomy

The MMCA describes two separate but interrelated processes. The right half of the model describes the process through which hierarchy *stability* induces feelings of collective autonomy restriction among disadvantaged group members and motivates them to participate in *social* movements that aim to *challenge* social hierarchy. The left half of the model outlines a process through which hierarchy *instability* induces feelings of collective autonomy restriction among advantaged group members and motivates them to participate in *counter*-movements that aim to *preserve* social hierarchy.

As a starting point, our model assumes that social hierarchy is stable, resulting in the unequal distribution of power in favor of advantaged groups over disadvantaged groups. Consistent with the “threat and defense” hypothesis of collective autonomy restriction, the right half of the MMCA (Figure 1, (R) Panel) illustrates how social hierarchy and the unequal distribution of power renders disadvantaged groups vulnerable to collective autonomy restriction (Figure 1, Box 1). We review social identity and relative deprivation literatures to hypothesize that whether collective autonomy restriction motivates disadvantaged group members to challenge the social hierarchy by mobilizing social movements depends on their *system beliefs* (Figure 1, A Path). System beliefs (i.e., individual mobility vs. social change beliefs), in turn, influence whether disadvantaged individuals compare their personal autonomy to that of other *individuals* (i.e., individual deprivation; Figure 1, Box 2a), or adopt a collective orientation and

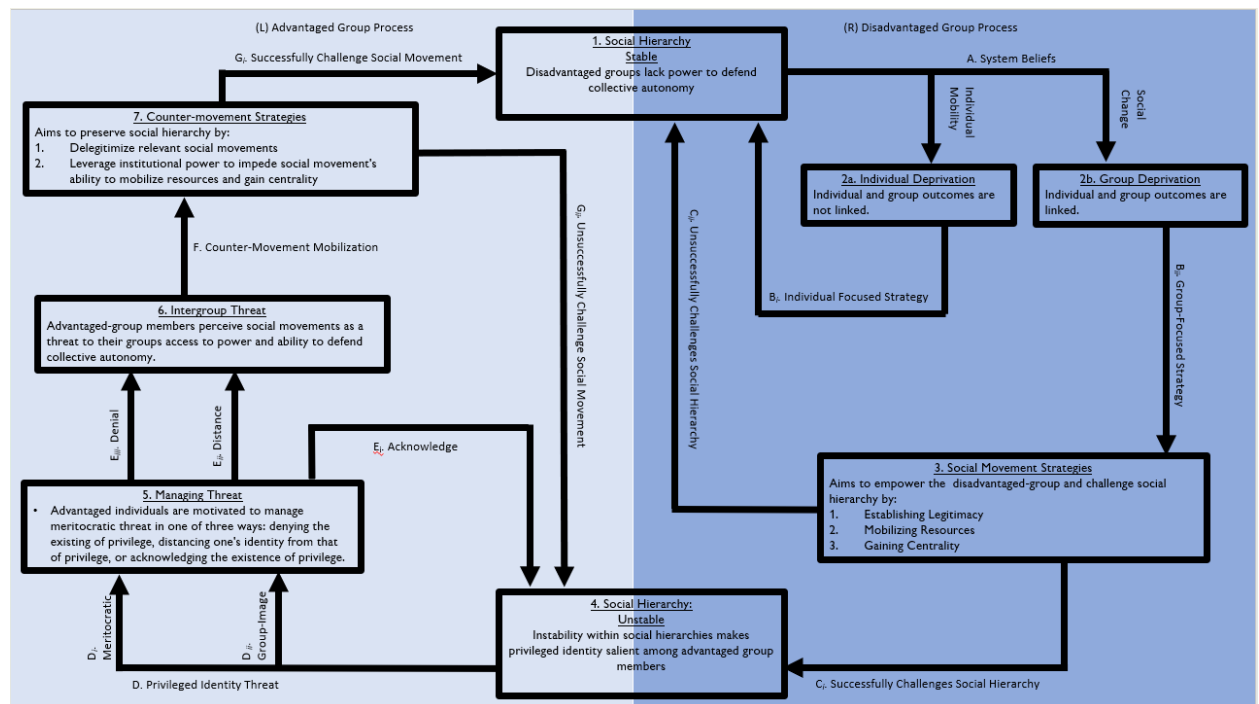
compare their ingroup's collective autonomy to that of other *groups* (i.e., group deprivation; Figure 1, Box 2a). The next part of our model examines how disadvantaged group members manage dissatisfaction with individual deprivation vs. group deprivation. We hypothesize that while individual identity management strategies (e.g., individuation) help disadvantaged individuals manage dissatisfaction with their personal autonomy, they do little to challenge social hierarchies that cause group deprivation of collective autonomy (see Figure 1, B_i Path). However, group-based identity management strategies (e.g., realistic competition) can motivate the mobilization of social movements to improve the position of the disadvantaged group by challenging the social hierarchy that restricts them (Figure 1, B_{ii} Path). We then integrate theory and data from movement mobilization and organizational behavior to articulate specific strategies that disadvantaged group-led social movements use to challenge social hierarchies. These strategies include establishing the movement's legitimacy, mobilizing resources, and gaining centrality within societal networks (Figure 1, Box 3).

The left half of the model (Figure 1, (L) Panel) assumes a context where social hierarchy has been made unstable by the effective mobilization of disadvantaged-group led social movements (see Figure 1, Box 4). We draw on privileged identity and threat management research to propose that hierarchy instability increases advantaged group members' awareness of their ingroup privilege, inducing meritocratic and group image threats (Figure 1, D Paths). We hypothesize that the way in which advantaged group members manage these threats will influence whether their behavior is motivated by the desire to protect social hierarchy or not. Advantaged group members who acknowledge their privilege should be more likely to see social movements that challenge social

hierarchy as legitimate and, as a result, may seek to manage threat from ingroup privilege by becoming allies to the social movement (Figure 1, E_i Path). In contrast, advantaged group members who deny ingroup privilege (Figure 1, E_{iii} Path), or cognitively distance themselves from ingroup privilege (Figure 1, E_{ii} Path), are more likely to view social movements that challenge social hierarchy as illegitimate and a threat to the ingroup's collective autonomy. Perceived threat to collective autonomy, in turn, is likely to mobilize counter-movements to preserve the social hierarchy by delegitimizing social movements and capitalizing on institutional power (Figure 1, F Path). The extent to which counter-movements are successful subsequently influence the stability (Figure 1, G_i Path), or instability of the social hierarchy (Figure 1, G_{ii} Path).

Figure 1.

Movement Mobilization Model of Collective Autonomy (MMCA).



Note. **Box 1:** Stable social hierarchy leaves disadvantaged groups vulnerable to collective autonomy restriction. **Path A:** System beliefs refers to whether disadvantaged group members believe that social stratification is permeable (individual mobility is possible), or impermeable (individual mobility is virtually impossible; social change is needed). **Box 2a:** Individuals who

endorse individual mobility beliefs are likely to see individual vs. group mobility as independent from one another, leading them to compare their personal autonomy to that of others. **Box 2b:** Individuals endorsing social change beliefs are likely to see individual and group mobility as linked, leading them to compare their ingroup autonomy to that of outgroups. **Path B_i:** Individual strategies manage unsatisfactory comparisons of personal autonomy to that of others but do little to challenge social hierarchy. **Path B_{ii}:** Group-based strategies motivate the desire to challenge social hierarchy through social movement mobilization. **Box 3:** Strategies that social movements adopt to effectively empower disadvantaged groups and challenge social hierarchy include establishing movement legitimacy, mobilizing resources, and gaining centrality. **Path C_i:** Social movements that effectively establish legitimacy, mobilize resources, and gain centrality make the social hierarchy unstable. **Path C_{ii}:** Social movements that fail to establish legitimacy, mobilize resources, and gain centrality struggle to challenge social hierarchy, which remains stable. **Box 4:** As social movements gain legitimacy in society advantaged group members' privileges become increasing salient. **Path D:** Increased salience of privilege threatens advantaged group members sense of competence (meritocratic threat) or reputation (group-image threat). **Box 5:** Advantaged group members manage threats from privilege in one of three ways: 1) by acknowledging their privilege and supporting the dismantling of social hierarchies; 2) by cognitively distancing themselves from group-based privilege; 3) by denying privilege. **Path E_i:** advantaged group members who acknowledge their privilege may seek to rebuild their groups reputation by becoming allies to the disadvantaged group-led social movement, further contributing to hierarchy instability. **Path E_{ii} & Path E_{iii}:** advantaged group members who distance themselves from privilege or deny the existence of privilege are more likely to perceive social movements as illegitimate and are motivated to defend their ingroup's collective autonomy. **Path F:** Perceived threat to power and collective autonomy motivate advantaged group members to mobilize counter-movements. **Box 7:** Counter-movements seek to resist social change by delegitimizing social movements in the eyes of the public and leveraging institutional power to impede social mobilization. **Path G_i:** Counter-movements that successfully resist social movements make social hierarchy stable. **Path G_{ii}:** Failure to resist social change further destabilizes social hierarchy.

Social Hierarchy and the Unequal Distribution of Power and Resources Leaves

Disadvantaged Groups Vulnerable to Collective Autonomy Restriction

As societies become complex, they create social order by developing a system to allocate tangible resources (e.g., food, land, water, sexual partners, etc.) and intangible resources (e.g., political representation, social influence, cultural capital, group-esteem, etc.) (Comas-Díaz & Greene, 1994; Halevy et al, 2011; Henrich & McElreath, 2003; Sapolsky, 2005; Schwalbe et al., 2000). The distribution of these resources is often guided by social hierarchy, such that higher status groups are afforded greater access to resources at the cost of lower status groups, which makes the former substantially more advantaged than the latter (Koski et al., 2015, Halevy et al., 2011; Henrich & McElreath,

2003; Sapolsky, 2005). Inequity in the distribution of resources creates inequity in power that allows advantaged groups to control disadvantaged groups by restricting their access to tangible and intangible resources (Anderson, Hildreth, & Howland, 2015).

Restricting disadvantaged groups' access to tangible resources — for example through geographic segregation that confines their members to poverty-stricken areas or restricting their access to education, nutritious food, and homeownership — negatively impact disadvantaged group members' mental and physical health, social mobility, and quality of life (Feagin & Cobas 2015; Gee & Ford, 2011; Gee & Hicken, 2021; Gee & Ro, 2009; Martínez et al., 2021; Phelan & Link, 2015). Similarly, restricting disadvantaged group's access to intangible resources — for example by pressuring underrepresented minorities to assimilate to the majority culture or by reinforcing negative stereotypes — harms disadvantaged group members feeling of self-worth and subjective wellbeing (Comas- Díaz & Greene, 1994; Schwalbe et al., 2000).

The “threat and defense” hypothesis of collective autonomy restriction proposes that whether a group has collective autonomy depends on its position within the social hierarchy and access to tangible and intangible resources. Groups at the top of the hierarchy enjoy access to many tangible and intangible resources, which they use to protect their collective autonomy whereas groups at the bottom of the hierarchy have fewer resources, leaving them vulnerable to collective autonomy restriction (Belsha, 2020; Kachanoff, 2017; Kachanoff, 2019; Kachanoff et al., 2020; Kachanoff et al., 2022). Given this hypothesis, one might expect that limited access to power and resources and resulting collective autonomy restriction would motivate all disadvantaged group members to challenge social hierarchies that constrain them and, by extension, engage in

collective action to challenge social hierarchy (Drury & Reicher, 2005; Reicher, 1996). However, the story is not that simple.

Under What Conditions Do Disadvantaged Groups Engage in Social Movements?

Decades of social psychological research indicates that disadvantaged group members' decisions to engage in collective action depends on whether they see social hierarchy as permeable or impermeable (i.e., their system beliefs), and inequality as individual-based or group-based (van Stekelenbur & Bert, 2013; Van Zomeren, Postmes, & Spears, 2008). Given that these factors are important predictors of collective action, it is unlikely that perceptions of collective autonomy restriction by itself is sufficient to compel social movement mobilization among disadvantaged group members. We propose that disadvantaged group members who see their fate as linked to that of their broader social group (i.e., social change beliefs; Figure 1, A Path) are more sensitive to group-based restrictions to collective autonomy (Figure 1, Panel 2b), and are more likely to engage in group-based efforts – like social movement mobilization - to ameliorate inequality (Figure 1, B(ii) path).

System Beliefs and Individual vs. Group- Based Deprivation

It is well documented that individuals who see themselves as members of a social group rather than purely autonomous individuals are more likely to participate in social movements to address dissatisfaction with their group's outcomes (Simon & Klandermans, 2001; van Stekelenbur & Klandermans, 2013; Van Zomeren, Postmes, & Spears, 2008). According to social identity theory, whether people navigate social situations thinking of themselves as individuals vs. group members depends on their system beliefs (Ellemers & Bos, 1998; Tajfel & Turner, 2004; Turner et al., 1987).

System beliefs refer to how an individual views the relationship among social groups within the broader social hierarchy and can be conceptualized as a continuum with two polar extremes (Tajfel & Turner, 2004). On one extreme are *individual mobility beliefs*, or the belief that societal strata are flexible and permeable and mobility from one to another stratum is easy and can be navigated through individual action. On the other extreme of the continuum are *social change beliefs*, or the belief that societal stratification is inflexible and impermeable, making it virtually impossible for individuals to escape the fate associated with their social stratum.

People who hold individual mobility beliefs are more likely to see their own outcomes as independent of others in their social group, and thus are more focused on interpersonal (i.e., egoistical) comparisons of their own outcomes relative to others (Cook, Crosby, & Hennigan, 1977; Crosby, 1976; Smith et al. 2012; Walker & Smith, 2009). In contrast, people who hold strong social change beliefs are likely to see the outcomes of the individuals and their group as inextricably linked, and thus be more likely to make social comparisons at a group level (Cook, Crosby, & Hennigan, 1977; Crosby, 1976; Smith et al. 2012; Walker & Smith, 2009). Applied to our model, we hypothesize that system beliefs influence disadvantaged group members' perceptions of collective autonomy restriction. Those who see their personal fate as independent of their social group (i.e., strong individual mobility beliefs) are more likely to make interpersonal comparisons of personal autonomy because to them individual autonomy is preminent (see Figure 1, Panel 2a). In contrast, others who see their personal fate as inextricably linked to their group's fate (i.e., strong social change beliefs) are more likely to make group-level comparisons of collective autonomy (see Figure 1, Panel 2b). In the

next section, we examine how dissatisfaction with group-based comparisons of collective autonomy may increase disadvantaged groups' likelihood of engaging in social movement mobilization.

Identity Management Strategies and Social Movement Engagement

Individuals adopt a range of identity management strategies to cope with dissatisfactory social comparisons (also referred to as social creativity; Ellemers & Bos, 1998; Tajfel & Turner, 2004) that are categorized based on their *mode of response* and *target of change* (see Blanz et al., 1998). Mode of response refers to whether the identity management strategy is predominantly a cognitive vs behavioral process, while target of change refers to whether the identity management strategy focuses on the individual or group level.

Examples of cognitive identity management strategies include *individualization* (which are individual-focused strategies) and *changing comparison dimensions* (which are group-focused strategies). Individualization focuses on protecting the individual's self-esteem from harmful stereotypes and stigma associated with their ingroup by cognitively distancing oneself from the disadvantaged group (Ng, 1989; Turner et al., 1987). Changing comparison dimensions is a group-focused cognitive strategy that protects disadvantaged group members' self-esteem through a collective shift in group values, for example, by rejecting or reversing the value associated with intergroup comparison dimensions or by changing the dimension of intergroup comparison (Tajfel, 1978).

While cognitive identity management strategies are useful ways of protecting individuals' self-image, they do little to confront structural inequalities. Individuals who seek to address unsatisfactory social comparisons by changing their outcomes relative to their target of comparison (whether that be another individual or group) may choose to engage in behavioral identity management strategies. Examples include individual mobility and realistic competition. As the name suggests, individual mobility is a behavioral identity management strategy that focuses on individual action (Tajfel, 1978; Taylor & McKirnan, 1984; Wright et al., 1990). It is behavioral in the sense that an individual makes an active effort toward social advancement. If the individual is successful, increased access to resources, status, and power may satisfy interpersonal comparisons that were previously unsatisfactory. In contrast, realistic competition is a behavioral identity management strategy that focuses on the group. It involves a collective effort to improve group outcomes by competing for greater access to resources, status and power (Sherif, 1966; Tajfel & Turner, 2004). When groups successfully engage in realistic competition, perceived increases in the group's access to these resources satisfy previously unsatisfactory intergroup comparisons.

System beliefs influence the type of identity management strategy that disadvantaged group members use to cope with unsatisfactory social comparisons (Ellemers, 1993; Ellemers et al., 1993; Ellemers et al., 1998; Ellemers et al., 1990). The likelihood of adopting individual-focused identity management strategies compared to group-focused ones increases when individual mobility beliefs are high. Indeed, Taylor and McKirnan's (1984) five-stage model of intergroup relations argues that individuals from disadvantaged groups will first attempt to gain membership with more advantaged

groups through individual mobility if they perceive societal hierarchies to be permeable (see also Jackson et al., 1996; Wright et al., 1990). Other research shows that disadvantaged group members who hold individual mobility beliefs prefer to first engage in individual-focused management strategies, even when they are difficult or selective (Lalonde & Silverman, 1994; Wright et al., 1990). Conversely, when social change beliefs are strong, disadvantaged group members are more likely to adopt group focused strategies. For example, both self-identified smokers (a stigmatized group) and women (a relatively disadvantaged group in the gender hierarchy) are more likely to adopt group-focused identity management strategies if they hold stronger social change beliefs as compared to individual mobility beliefs (Jackson et al., 1996).

Applying extant research to our model, we propose that a similar process unfolds when disadvantaged group members perceive that their collective autonomy is restricted relative to other groups. We predict that those who hold individual mobility beliefs and are dissatisfied with their personal autonomy relative to other individuals, are likely to use individual focused strategies – like individuation and individual mobility - to protect their self-image and improve their individual outcomes, but do little to challenge existing social hierarchy (Figure 1, B_i Path). In contrast, those who hold social change beliefs and are dissatisfied with group comparisons of collective autonomy are more likely to adopt group-focused identity management strategies, such as realistic competition, that aim to challenge existing social hierarchies through social movement mobilization (Figure 1, B_{ii} Path).

Social Movement Efficacy: Strategies to Empower Disadvantaged Groups

How do grassroots social movements challenge social hierarchy effectively despite limited access to power and resources? To address this question, this section synthesizes psychological and sociological research on social movement efficacy with organizational behavior literatures on the strategic actions of low status organizations within organizational hierarchies. From this synthesis, we identify three key strategies that are hypothesized to increase the efficacy of social movements: (1) gaining legitimacy, (2) mobilizing resources, and (3) gaining centrality in the social network (for a review see Bouquet & Birkinshaw, 2008). We incorporate these into our model to hypothesize that social movement efficacy, operationalized as empowering disadvantaged group members and challenging social hierarchy, depends on the ability of a social movement to successfully put these strategies in action (Figure 1, Box 3).

Achieving Legitimacy

From the perspective of organizational science, legitimacy refers to the extent to which the structural organization of any hierarchical system is perceived to be congruent with the goals, objectives, and behaviors of a critical mass of entities that comprise the hierarchy (Weber, 1947; Dowling & Pfeffer, 1975; Suchman, 1995; Bouquet & Birkinshaw, 2008). Applying this definition to social (rather than organizational) hierarchies, legitimacy refers to the extent to which the distribution of power is perceived as congruent with the norms, values, and beliefs of a critical mass of groups within a population (Subasic et al., 2008; Suchman, 1995; Van Stekelenburg & Klandermans, 2013). According to organizational behavior, an entity's (e.g., group's) access to power is directly proportional to the extent to which others perceive the values, beliefs, and actions

of that entity to be congruent with those of the broader organizational system (Suchman, 1995, Weber, 1947; Meyer & Rowan, 1977). Thus, if low status entities (or disadvantaged groups) desire greater access to power, they ought to aim to increase their perceived legitimacy in the eyes of other entities (Bouquet & Birkinshaw, 2008; Mitchel, Agle, & Wood, 1997; Kostova & Zaheer, 1990). This strategy of gaining power by appealing to norms, values, and beliefs congruent within the broader social system (a process referred to as social approval; Bouquet & Birkinshaw, 2008) parallels the ways in which disadvantaged group-led social movements seek to establish their legitimacy within society. Extensive research has documented how social movements establish legitimacy by aligning their goals, values, and principles with those of the broader society (Andrews, Beyerlein, & Tucker, 2016; Dowling & Pfeffer, 1975; Moyer, 2001; Suchman, 1995; Weber, 1947).

When considering legitimacy in the context of social movements, it is important to distinguish between internal vs. external legitimacy, both of which are important determinants of social movement efficacy (Kwok & Chan, 2017; McCarthy & Zald, 1977; Rao, Morill, & Zald, 2000; Zald & Ash, 1966). Internal legitimacy refers to the degree to which the goals and leadership of a social movement are aligned with the interests of constituents participating in the movement (Kwok & Chan, 2017; Zald & Ash, 1966). If at any point the goals of a social movement shift and cease to be aligned with its constituency, it risks losing members (McCarthy & Zald, 1977; Zald & Ash, 1966). As we will discuss in the next section, an active constituency is necessary for social movement efficacy. Maintaining internal legitimacy is crucial for keeping a social movement alive.

External legitimacy refers to the extent to which the norms, values and beliefs of a social movement are aligned with the values and principles of the broader society and parallels the definition of legitimacy in organizational behavior (Andrews, Beyerlein, & Tucker, 2016; Weber, 1947; Bouquet & Birkinshaw, 2008; Dowling & Pfeffer, 1975; Suchman, 1995). The primary way social movements establish external legitimacy is by raising public awareness about social injustices via protests and demonstrations; attempting to convince the public that institutions of power have failed to address this issue; and that lack of resolution violates socially cherished values and principles (Andrews, Beyerlein, & Tucker, 2016; Kwok & Chan, 2017; Moyer, 2001; Zald & Ash, 1966).

Las Madres del Plaza Mayo in Argentina (and similar women-led movements in Chile, Uruguay, and El Salvador) provide excellent real-world examples of how social movements can gain legitimacy in society. This social movement, which marked a major shift in Argentina's transition towards democracy, challenged the authoritarian state and demanded democracy and the release of young Argentinians who were taken political prisoners by the military dictatorship in power at the time. Through countless protests in La Plaza Mayo, Las Madres successfully educated the public about the transgressions the Argentinian government had committed against political activists advocating for democracy. Indeed, much of its success is attributed to its ability to gain legitimacy by appealing to Catholic symbols and values related to motherhood and family (Alvarez, 1989; Safa, 1990). By framing the social injustices perpetrated by the authoritarian government as a violation of these religious symbols and values, and the movement's goals as fighting to protect them, these women were able to empower themselves and

create social change by enhancing the legitimacy of their movement in the eyes of the general population.

Resource Mobilization

The success of any complex structural organization, whether it be a multinational corporation or existing social hierarchy, depends on its ability to access and distribute limited resources (Ghoshal & Bartlett, 1990; Schwalbe et al., 2000). Resource distribution creates power and dependency within organizations, such that low-status entities depend on more powerful entities to access these resources (Bacharach & Lawler, 1980; Pfeffer & Salancik, 1978). While high status entities exercise more control over critical resources within organizational systems, low status entities usually have access and control over some limited resource that can be exchanged and bartered with higher status entities for access to other resources (e.g., worker unions control labor that they can exchange with employers for economic capital). Thus, the second strategy that low status entities adopt to gain more power within organizational systems is to tighten their control over any limited resources to which they have access and leverage them to increase access to other resources (Bouquet & Birkinshaw, 2008).

This strategy of controlling and leveraging resources to gain power within an organizational system parallels the ways in which disadvantaged social groups collectively pool and secure resources to affect social change--a process referred to as resource mobilization (Jenkins, 1983; Oberschall, 1973; McCarthy & Zald, 1977). Social movements seek to secure resources that either facilitate movement mobilization (e.g., by increasing the number of constituents, facilities and equipment that aid the organization of its constituents, etc.) or that can be leveraged to pressure high status actors or

institutions to address the grievances and demands of a social movement (Jenkins 1983; Rogers, 1974). These resources may be tangible (e.g., money, land, facilities, equipment etc.) or intangible (e.g., organizational and legal skills, public support, and labor from affiliated activists) (Jenkins, 1983).

Proponents of resource mobilization theory emphasize two types of Social Movement Organizations (SMOs): the “classical” (or grassroots) SMO and the “professional” SMO that facilitate the organization and mobilization of resources (Jenkins, 1983; McCarthy & Zald, 1977; Van Zomeren, Postmes, & Spears, 2008). Classical SMOs are grassroots organizations that are started and led by constituents directly impacted by the structural inequality the movement seeks to address (Jenkins, 1983). Classical SMOs focus efforts on the organization and mobilization of tangible and intangible resources that play pivotal roles in establishing legitimacy (Perrow 1979; Jenkins, 1983). For example, classical SMOs may seek to secure tangible resources such as facilities, equipment, and money to establish a base of operations. They may also seek to mobilize intangible resources like their constituents to organize public demonstrations, protests, and acts of civil disobedience to help establish legitimacy. Professional SMOs also seek to organize and mobilize tangible and intangible resources. Unlike classical SMOs, however, professional SMOs focus on the mobilization of technical and professional resources that exert pressure on institutions to address social injustices (Aveni, 1978; Barkan, 1984; Jenkins & Perrow, 1977). For example, professional SMOs may directly or indirectly work with politicians to pass legislation to address social injustice at an institutional level or fund legal counsel to force institutions to pay reparations through the court system. In sum, the success of a social movement depends

in part on its ability to pool both tangible and intangible resources. The mobilization of these resources is further facilitated by classical and professional SMOs which work to secure and leverage resources at the ground and institutional levels respectively.

Gaining Centrality

Organizational hierarchies are typically conceptualized as social networks (Astley & Sachdeva, 1984, Ibarra, 1983; Mizruchi & Bunting, 1981). Entities that are well-connected within the broader social organization are best positioned to leverage resources that they control to gain and maintain power (Bouquet & Birkinshaw, 2008; Hickson et al., 1971). By being well-connected (i.e., central) they have direct and indirect links to high status entities that control the exchange of valuable resources (Doz, Santos & Williamson, 2001; Ghoshal & Bartlett, 1990; Ghoshal & Nohria, 1989; Krackhardt, 1990). Conversely, entities that lack direct links to high status entities (i.e., peripheral entities) also tend to lack power. This is, in part, because their ability to freely exchange valuable resources with high status entities is limited and controlled by “middlemen” who broker exchange of resources between peripheral entities and high-status entities (Bouquet, 2005; Krackhardt, 1990). Thus, the third strategy that low-status entities adopt to gain power within organizational systems is to *gain centrality* within the broader organizational system (Boje & Whetten, 1981; Bouquets & Birkinshaw, 2008; Brass, 1984; Dubin, 1957; Hickson et al., 1971).

Just as low-status entities seek to gain power by creating connections with high-status entities within the broader social network, so to do social movements. Indeed, Moyer (2001) argues that the effectiveness of any social movement hinges on its ability to gain the support of the general public and establish connections with institutional

organizations (e.g., professional SMOs) that exercise power and influence at a systemic level. Several qualitative case studies of social movement campaigns have documented the important role played by social networks in establishing connections with both the general public and institutional organizations (Cable & Benson, 1993; Kitts, 2000; Mueller, 1997; Pfaff, 1996; Snow et al., 1980). These findings suggest that social movement efficacy depends on the movement's ability to make connections with the broader public and institutional organizations to stand the best chance of successfully challenging social hierarchy.

Social movements can gain centrality with the public in several ways. They may mobilize constituents to respond to a highly publicized incident of social injustice with nonviolent social theater (e.g., protests, marches, demonstrations, etc.) to raise public awareness of social injustice (Moyer, 2001). This, in turn, may help them gain additional support and sympathy from individuals directly impacted by social injustice (i.e., constituents), and others who are not directly impacted, but who nonetheless support the social movement's demands for reparation (i.e., allies) (Jenkins, 1983). At the organizational level, SMOs may leverage existing social networks to recruit constituents and allies from other organizations (Bolton, 1972; McCarthy & Zald, 1977; Oberschall, 1973). At the interpersonal level, research shows the larger the number and strength of interpersonal ties (i.e., ties with friends, family, and neighbors) the more a social movement grows at the local level (Kitts, 2000). As a social movement gains centrality within social networks and amasses active and passive support from the general public, a slow cultural shift begins to occur (Moyer, 2001). This cultural shift leads to changing social norms, beliefs, ideologies, and cultural practices that enhance its legitimacy and

social capital that can be leveraged to pressure institutions of power to address issues of inequality (Darnovsky et al., 1995; Johnston & Klandermans, 1995; Polletta, 1996).

Social movements may also gain centrality in political and institutional networks. As previously discussed, indigenous social movements often lead to the development of classical and professional SMOs that are uniquely positioned to create connections with powerful individuals and institutions that can help them push their agenda and achieve their goals (Aveni, 1978; Barkan, 1984; Jenkins & Perrow, 1977). For example, SMOs like the National Association for the Advancement of Colored People and the American Civil Liberties Union leverage professional networks with lawyers, congressional committees, legislators, and their staff to support legislation that aims to address social injustice at an institutional level. Similarly, political figures like Harvey Milk and Nelson Mandela exemplify how individual constituents can gain centrality within political networks to impact systemic change.

Summary

The strategies adopted by social movements that seek to empower disadvantaged groups parallel the strategies used by low status entities seeking greater power within any organizational system. These strategies include (1) aligning movement goals, beliefs, and ideologies with those of the broader society (i.e., establishing legitimacy), (2) securing and leveraging tangible and intangible resources (i.e., resource mobilization), and (3) establishing connections within social networks at the cultural and institutional level (gaining centrality). The extent to which a social movement can empower its constituents and challenge existing social hierarchies depends on how effectively it executes these three strategies (Figure 1, Panel 3).

Advantaged Group Members' Reactions to Social Movements and Hierarchy

Instability

Our model suggests that when social movements challenge social hierarchy effectively by gaining legitimacy, centrality, and mobilizing resources, they destabilize the social hierarchy (Figure 1, C_i Path). We propose that advantaged group members are likely to respond to this instability in one of two ways. Some may acknowledge the legitimacy of disadvantaged group's claims and be open to supporting the disadvantaged group's efforts. Others may deny the legitimacy of social movements and become protective of social hierarchy and their advantaged position within it. What factors influence the tendency to deny or acknowledge the legitimacy of disadvantaged group led social movements? In the proposed model we argue that social hierarchy instability increases advantaged group members' awareness of their privilege and threatens their self-image (Figure 1, D paths). The way people manage threats to self-image is predicted to influence whether they acknowledge or deny inequality and the legitimacy of social movements that challenge it (Figure 1, Panel 5).

Managing Privileged Identity Threat

Much of the early literature on social identity shared the assumption that advantaged individuals navigate life unaware of their privileged social identity (Hartmann et al., 2009; McDermott & Samson, 2005). That perspective has changed over the years thanks to research on the role of White identity in creating and maintaining the racial hierarchy in the U.S. (Frankenberg, 1993; Lopez, 1997; Knowles & Peng, 2005; Perry, 2002; Phinney, 1996; Wong & Cho, 2005). Since then, several studies have documented links between the strength of social identification with advantaged ingroups

and the desire to maintain the ingroup's advantaged position in existing social hierarchies (Lowery et al, 2006; Branscombe et al., 2007; Hornsey et al., 2003). Identification with an advantaged ingroup could threaten one's self-image if the group's privilege was achieved through unfair advantages (e.g., through the subjugation of other groups) (Branscombe, 1998; Knowles et al., 2014; Powell et al., 2005). We propose that privileged identity threat is exacerbated when social movements challenge a social hierarchy effectively by gaining legitimacy through the mobilization of cultural and institutional resources. Building on Knowles and colleagues (2014) seminal research on privileged identity, we propose that increased privileged identity salience induces two distinct types of self-image threat (meritocratic and group-image threat), that influence whether advantaged group members are likely to acknowledge vs. deny the existence of inequality and the legitimacy of social movements.

Meritocratic Threat

The recognition of one's privilege can threaten advantaged individuals' attributions of personal merit for their status and resulting self-esteem (i.e., meritocratic threat) when they grapple with the reasons for their successes and failures (Knowles et al. 2014). Typically, people make self-serving attributions, such that success is attributed to personal merit and competence (i.e., internal attributions) while failure is attributed to situational forces that the individual cannot control (i.e., external attributions) (Campbell & Sedikides, 1999; Heine & Lehman, 1997; Sedikides et al., 1998). When privilege is made salient, these self-serving attributions are challenged, as success may no longer be purely attributed to internal characteristics, nor failure be purely attributed to external circumstance. In other words, meritocratic threat results from situations where

advantaged group members are confronted with the possibility that their life accomplishments were not fully earned by effort, merit, and personal character, but instead resulted, at least in part, from their privileged position in society that affords them greater access to power and resources that can be leveraged for success (Branscombe, 1998; Kelley, 1987; Morris & Larrick, 1995). Similarly, failures may become more threatening to advantaged group members as they grapple with the possibility that they failed despite their privilege (Branscombe, 1998; Kelley, 1987; Morris & Larrick, 1995).

Group-Image Threat

In addition to meritocratic threats, the prospect of privilege may also be threatening to advantaged groups' collective image (i.e., group-image threat) if their privileged status was achieved through unfair social advantage. For example, learning about historical racial transgressions committed by Whites in the U.S. may induce negative emotions such as shame or guilt among White Americans grappling with the knowledge that their racial group's advantaged position resulted from the subjugation of other groups (Branscombe, 1998; Powell et al., 2005). In turn, these negative emotions and opinions may threaten disadvantaged individual's self-image as moral actors who value equality (Kachanoff et al., 2022; Wohl et al., 2006).

Strategies to Manage Threats from Privileged Identity

Advantaged groups contend with these two types of threats by engaging in one or more of the following identity-management strategies: 1) denial of privilege, 2) cognitive distancing of their self-concept from privileged identities, and 3) acknowledgement of privilege (see Knowles et al., 2014 for a review). Denial of privilege is an identity

management strategy adopted by advantaged group members to assuage meritocratic threat. Several studies show that advantaged individuals deny privileges associated with their ingroup in situations where their merit or self-competence is threatened (Knosles & Lowery, 2012; Lowery, Knowles, & Unzueta, 2007; Unzueta, Lowery, & Knowles, 2008). For example, one study indicates that White participants are more likely to deny the existence of racial inequality when their intelligence was challenged (vs. affirmed), presumably to reduce the sting of failure (Lowery, Knowles, & Unzueta, 2007).

Distancing or disidentifying with the advantaged ingroup is a second strategy that advantaged group members may adopt to manage meritocratic or group image threats. Research indicates that distancing one's self-concept from the advantaged ingroup can help protect advantaged individuals' self-serving attributions of success and failure, as doing so helps them believe that privilege does not apply to them (Branscombe et al., 2007; Chow et al., 2008; Davey, Bobocel, Son Hing & Zanna, 1999; Luthen & Crocker, 1992). By distancing themselves from the ingroup, advantaged group members can also protect themselves from experiencing threats associated with learning that the ingroup's advantaged position was achieved through unfair advantage (i.e., group-image threats) (Chow, Lowery & Knowles, 2008).

Finally, acknowledging privilege is a third identity management strategy that advantaged group members might adopt to cope with group image threat. By acknowledging privilege, advantaged group members become more open to engaging in actions and endorsing policies that address group-based inequality (Kappen, 2000). In doing so, advantaged group members cope with feelings of guilt, shame, or embarrassment and seek to repair damage to their group's reputation (Powell et al. 2005).

When do Advantaged Group Members Acknowledge vs. Deny their Privilege?

Our proposed model suggests that the management strategies advantaged group members use to cope with privileged identity threat influences their support vs. opposition to social movements led by disadvantaged groups. What factors determine whether advantaged individuals will feel motivated to support steps that dismantle hierarchies vs. deny or distance themselves from it? Extant research suggests that group identity strength is an important predictor of the type of identity management strategy that advantaged group-members adopt while grappling with the implications of their privilege (Branscombe et al., 2007; Knowles & Lowery, 2012;; Lowery et al., 2007). For example, a series of experiments by Lowery and colleagues (2007) found that whether or not White Americans denied the existence of White privilege depended on the extent to which they believed that they shared a common fate with their racial ingroup (i.e., a proxy for strength of social identity), such that stronger belief in common fate predicted greater denial of privilege. In contrast, White Americans who reported weaker identification with their racial in-group were more likely to acknowledge the existence of social inequality and support social policies that promoted racial equity (Lowery et al., 2007).

Managing Privileged Identity Threat in Response to Social Movements

As we previously mentioned, in our model we propose that disadvantaged group led social movements increases the visibility of privilege among advantaged group members (Figure 1, Panel 4; see Crandall et al., 2018; Ruisch & Ferguson, 2022 for related arguments). We also propose that the way in which advantaged group members manage their privileged identity is related to their acknowledgement or denial of the

legitimacy of disadvantaged group led social movements (Figure 1, Panel 5). In support of this, research has shown that advantaged individuals who manage their social identity threat by acknowledging their privilege and the role that it plays in the creation and maintenance of social inequality are more empathetic towards disadvantaged groups and more supportive of efforts to achieve equality (Rios et al., 2022). Research also shows that the recognition of one's privilege motivates support for disadvantaged group led social movements through allyship (Ashburn-Nardo, 2018; Radke et al., 2020). Conversely, advantaged group members who deny the existence of privilege or distance themselves from their privileged identity are much more likely to adopt negative attitudes and behaviors toward disadvantaged groups and social movements that challenge social hierarchy (Phillips & Lowery, 2020; Dobbs & Nicholson, 2022; Branscombe et al., 2007; McDermott & Samson, 2005). In its extreme form, denial of inequality or distancing one's self-concept from privilege may lead advantaged group members to also believe that they themselves are the victims of discrimination (claiming "reverse discrimination;" Hartmann et al., 2009; Knowles et al., 2022; Norton & Sommers, 2011; Sidanius et al., 2000; Selvanathan et al., 2021).

In sum, integrating past findings, we argue that when social movements successfully challenge existing social hierarchies, advantaged group members are confronted with their privileged identity, which can be threatening to their self-image. Success may no longer be purely attributed to personal merit, but instead may also be attributed to people's privilege (i.e., meritocratic threat). Confronting personal privilege also involves grappling with evidence that one's position within society resulted from the historical oppression of other groups (i.e., group image threat). To manage these threats,

advantaged group members may deny that privilege exists, distance themselves from their privileged identity, or acknowledge their privilege and actively work to dismantle the systems that afford them their advantage. In the proposed model, we argue that acknowledging privilege motivates advantaged group members to repair the moral reputation of the advantaged ingroup by supporting disadvantaged group led social movements (Figure 1, E_i Path). The denial of privilege, and/or the distancing of oneself from privilege, makes advantaged group members more likely to deny the legitimacy of disadvantaged group led social movements. In their eyes, any inequality observed in society must be a result of individual merit or lack thereof.

Perceiving Social Movements as Illegitimate Induces Intergroup Threat and Collective Autonomy Restriction

Denial of privilege and social movement legitimacy sets the stage for the next part of our model (Figure 1, $E(ii)$ and $E(iii)$ paths). We argue that advantaged group members who deny the existence of privilege, or cognitively distance their self-image from privilege, are likely to believe that dismantling of social hierarchy via social movement mobilization is an illegitimate course of action. Perceived illegitimacy, in turn, is predicted to make advantaged group members feel that their group is being unfairly stripped of power, resources, and collective autonomy (Figure 1, Panel 6). Support for this portion of the model comes from group-based threat research.

Integrated Threat in Response to Social Movements

Several studies have shown that shifts in social norms, values, and beliefs induce feelings of threat among advantaged group members. Perceived threat stems from the concern that changes to the social system will result in a loss of the ingroup's access to

power, resources, and social influence (Butz & Yogeeswaran, 2011; Craig & Richerson, 2014; Moss et al., 2019; Morrison et al., 2009; Morrison & Ybarra, 2008; Outten et al., 2012; Rivera-Rodriguez, Larsen, & Dasgupta, 2021; Schmuck & Matthes, 2017; Stephan & Stephan, 2000; Xiao & van Bavel, 2012). These may involve access to material resources (i.e., realistic threat), maintenance of the group's beliefs, values, and worldviews (i.e., symbolic threat), or the group's position in the social hierarchy relative to other groups (i.e., social status threat).

Research shows that intergroup threats are activated by a variety of social contexts. For example, one study conducted in Austria found that exposing Austrian citizens to political propaganda portraying immigrants as sources of cheap labor activated concerns that the immigrant population would restrict native-born Austrians' access to economic resources and job security (i.e., realistic threat) (Schmuck & Matthes, 2017). The same study also found that political propaganda that called into question the morality of immigrant groups raised concerns that the values of incoming immigrants would conflict with traditional Austrian values and worldviews (i.e., symbolic threat) (Schmuck & Matthes, 2017). Similar findings have been found in survey and lab-based studies in the U.S. (Morrison et al., 2009; Morrison & Ybarra, 2008; Xiao & van Bavel, 2012; Duwoody & Plane 2019). For example, mere exposure to demographic trends indicating that the numeric advantage of White racial groups in multicultural nations like the U.S. and Canada is declining and trending towards a "majority minority" nation induced realistic, symbolic, and social status threat among White Americans and Canadians (Craig & Richeson, 2014; Danbold & Huo, 2014; Major et al. 2018; Outten et al., 2012).

Applied to our proposed model, mounting evidence also indicates that advantaged group members also experience intergroup threat when social movements are effective in challenging the social hierarchy. For example, symbolic threat explains the backlash from religious majority groups in response to the progress made by the abortion rights movement in the U.S. (Gordon & Hunter, 1979; Karrer, 2011; Van Assendelft, 1999). Pro-life counter-movements argue that abortion threatens Christian beliefs and worldviews regarding family, reproduction, and the role of women in society. Another example comes from reactions to immigrant rights movements of the early 2000s, which elicited backlash from political elites and their constituents. This was motivated by the belief that immigration threatened Americans' access to economic resources (realistic threat), social status (social status threat), and undermined traditional American values (symbolic threat) (Steil & Vasi, 2014). Still more evidence from LGBTQ+ movements suggest that opposition to same-sex marriage among political conservatives was in part motivated by the belief that it undermined conservative beliefs regarding the "traditional family" and the "sanctity of marriage" (Carol, 2013; Fetner, 2001; Fetner, 2008; Gaines & Garand, 2010; Sherkat et al., 2011; Van der Toorn et al., 2017). Finally, research has examined whether inducing various types of group threats influence dominant groups' support of feminist social movements that challenge the gender hierarchy (Rivera-Rodriguez, Larsen, & Dasgupta, 2021). Findings showed that leading people to believe that Americans value traditionally masculine traits (like competitiveness) less today compared to 30 years ago induced greater symbolic and social status threat among men, which in turn predicted less support for feminist social movements like the #MeToo movement and the Women's March.

Applying these findings into our model, we propose that advantaged group members who deny the existence of social inequality and the legitimacy of social movements are the most likely to believe that challenges to existing social hierarchies threaten their group's access to resources (i.e., realistic threat), social influence (i.e., symbolic threat), and advantaged position within the hierarchy (i.e., social status threat) (Figure 1, E path). By extension, these perceived threats will likely cause advantaged group members to believe that their ability to preserve their collective autonomy is at risk (Figure 1, Box 6), motivating them to engage in compensatory counter-movements that oppose the disadvantaged group's social movement (Figure 1, F path). In the following section, we review literatures on collective autonomy restriction and counter-movement mobilization that provide support for the theorized link between intergroup threat, collective autonomy restriction, and advantaged group members' desire to protect the social hierarchy.

Perceived Restriction of Collective Autonomy Motivates Counter-Movement

Mobilization to Preserve the Social Hierarchy

Counter-movements are “a conscious, collective, organized attempt to resist or reverse social change” (Mottl, 1980, p.620). Counter-movements are often created by, or share common goals with, political and institutional elites who leverage their power to rally a counter-movement's constituency and oppose social movements (Germani, 1978; Skocpol, 1979; Van Dyke & Soule, 2002; McVeigh, Myers, & Sikkink, 2004; McVeigh, 2009; Oberschall, 1973; Mottl, 1980). While social movements typically mobilize from the bottom up, such that grassroots constituents self-organize to fight for representation at the institutional level, counter-movements typically mobilize from the top-down (Mottl,

1980). In other words, “[Social] movements challenge groups higher up in the stratification hierarchy, while counter-movements are oriented against challenges from below.” (Mottl, 1980, p.621).

These differences between advantaged and disadvantaged group’s access to structural power is reflected in the strategies that counter-movements adopt to resist social change by impeding a social movement’s ability to establish legitimacy, mobilize resources, and gain centrality. One way that counter-movements delegitimize social movements is by arguing that social hierarchies are based on legitimate worldviews such as meritocracy (Ellemers & Barreto, 2009; Lardier et al. 2019; Ledgerwood et al., 2011; Major et al., 2007), or “founder ownership,” which is the belief that a nation’s laws and institutions should be dictated by the group that descended from the nation’s founders (Selvanathan et al., 2021). They may also seek to delegitimize social movements by arguing that challenges to existing social hierarchy constitute reverse discrimination that unfairly targets advantaged groups (Dovidio et al., 1989; Knowles et al., 2022; Norton & Sommers, 2011). In addition to delegitimizing attempts, counter-movements also leverage their institutional power to restrict the mobilization of resources by social movements and block their ability to gain centrality within institutional systems of power. Examples of such strategies includes voter intimidation and voter suppression campaigns (Combs, 2016; Perry et al., 2022; Swirsky, 2001), mobilization of armed militias to overturn election results (Paulus & Kenworthy, 2022), and using political power to resist social change policies (Meyer & Saggenborg, 1996; Mottl, 1980).

Counter-Movement Mobilization Motivated by Collective Autonomy Restriction

Building on the “threat and defense” hypothesis of collective autonomy restriction (Kachanoff et al., 2022), the MMCA outlines a process where perceived threat from social movements motivates counter-movement activity among advantaged group members (Figure 1, F path). To our knowledge, only one study has examined advantaged group members’ perceptions of collective autonomy restriction (Kachanoff et al., 2019). This correlational study, which focused on racial hierarchy in the U.S., found that despite their advantaged position within the racial hierarchy, some White Americans believe that their racial group’s collective autonomy was restricted by other groups. Furthermore, whereas collective autonomy restriction was associated with greater opposition to hierarchy legitimizing ideologies among Black Americans, it was associated with greater endorsement of these ideologies among White Americans (Kachanoff et al., 2019). This link between collective autonomy restriction and greater endorsement of hierarchy legitimizing ideologies among White Americans may reflect the belief that their advantaged position relative to Black Americans is zero-sum, such that advantages gained by Black Americans results in disadvantage for White Americans (see also Norton & Sommers, 2011; Rasmussen et al., 2022 for related arguments). Within the context of collective autonomy, White Americans who perceive their racial groups’ autonomy as restricted may be motivated to act to preserve that hierarchy that affords them privileged access to the power, resources, and status.

Observational case studies of historical social movements and counter-movements also provide evidence of the link between collective autonomy restriction and the mobilization of counter-movements among advantaged groups. One such example involves the anti-busing counter-movement in Boston, Massachusetts, which first

emerged in response to school desegregation ordinances that resulted from the civil rights movement (1963-1974) and the Supreme Court's *Brown v. Board of Education* decision (Mottl, 1980). While these ordinances were effectively resisted by local politicians on behalf of their constituents for some time, it was not until the desegregation of public school seemed imminent that White Bostonians began to mobilize in a last-ditch effort to resist social change. This mobilization is what ultimately led to the rise of the anti-busing counter-movement in Boston that eventually spread to other American cities. Tactics used in the mobilization of the anti-busing counter-movement included demonstrations and lobbying for the repeal of school desegregation laws, establishing a nationwide anti-busing network, cutting school budgets to slow desegregation efforts, and the development of militant organizations to intimidate Blacks and supporters of school desegregation through acts of violence and terror such as stoning school buses and inciting physical violence (Mottl, 1980).

Appeals to both realistic and symbolic threats were used to delegitimize the desegregation of public schools and mobilize the anti-busing counter-movement. A combination of pervasive stereotypes associating Black people and neighborhoods with crime and a desire to keep White and Black communities separate contributed to the mobilization of the counter-movement (Mottl, 1980). However, the most pervasive ideology used to mobilize the anti-busing counter-movement was the idea that forced desegregation was a violation of White parental autonomy (Mottl, 1980). This ideology eventually gave rise to Restore Our Alienated Rights (ROAR), one of the most powerful and militant anti-busing organizations of the counter-movement. ROAR was a women-led counter-movement organization built around the ideology that the desegregation of

the Boston public school system and forced busing violated White motherhood and parental autonomy (Nutter, 2010). Specifically, ROAR argued that school desegregation and forced busing violated White parents' right to choose which school their children would attend, as well as their decision as to who should have access to their neighborhood's schools (Nutter, 2010; Williams & Lovin, 1978).

The belief that desegregation violated parental rights reflected an ideology of collective autonomy held by White Bostonians at the time, which included the defense of their right to make decisions regarding desegregation and busing independent from governmental influence, overriding racial integration and equality of education across race (Williams & Lovin, 1978). This ideology of white supremacy was further amplified by New England and Boston's tradition of "liberty and freedom" that emphasize individualism, independence, and personal choice above unwanted governmental influence (Williams & Lovin, 1978). We interpret the Boston anti-busing counter-movement as evidence that White Bostonians perceived the desegregation of public schools and busing to be a restriction to their collective (racial) autonomy, which in turn motivated the mobilization of a militant counter-movement that sought to resist social change.

Conclusion

In the present review, we introduce the Movement Mobilization Model of Collective Autonomy (MMCA) to derive hypotheses about the social contexts and psychological processes that lead to the mobilization of social movements and counter-movements. Specifically, we hypothesize that hierarchy stability, social change beliefs, and dissatisfaction with group-based comparisons of collective autonomy drive social

movement mobilization among disadvantaged group members. Conversely, hierarchy instability, denial and/or distancing from social privilege, and various forms of intergroup threat increase perceptions of collective autonomy and motivate counter-movement mobilization among advantaged group members. This model makes several novel contributions that advance our understanding of the role of social hierarchy, power, identity, and social movement/counter-movement dynamics among disadvantaged group members.

First, our model extends Kachanoff and colleagues “threat and defense” hypothesis by proposing distinct psychological processes that predict 1) when disadvantaged and advantaged group members will perceive that their collective autonomy is restricted, and 2) when disadvantaged and advantaged group members will mobilize to defend their collective autonomy via social movements and counter-movements. Future research can directly test the veracity of these psychological processes by examining whether system beliefs (i.e., individual mobility vs. social change) shape perceptions of collective autonomy restriction among disadvantaged group members; and whether the denial of, and/or distancing from, privileged identities shapes perceptions of collective autonomy restriction among advantaged group members. Future research can also test whether the use of group-focused (as opposed to individual-focused) identity management strategies increases the desire to protect collective autonomy via social movement mobilization among disadvantaged individuals; and whether perceptions of intergroup threat (realistic, symbolic, and social status threat) motivate the desire to protect collective autonomy via counter-movement mobilization among disadvantaged individuals.

Second, while extant research on collective autonomy and social movement mobilization tends to examine social movements and counter-movements separately, our model illustrates a dynamic process where advantaged and disadvantaged group members' perceptions of collective autonomy, social hierarchy, and decisions to mobilize are influenced by one another. We also synthesize research across disciplines (psychology, sociology, organizational behavior, history) to identify three strategies – increasing legitimacy, access to resources, and centrality within social and institutional networks – that allow social movements initiated by low-status groups to gain traction. This is especially relevant for future research on counter-movements, which traditionally focus on advantaged individuals' perceptions of structural changes resulting from the later stages of social movements (Moyer, 2001). By considering the strategies that disadvantaged groups use to gain traction during the early stages of social movement development, future research can hypothesize how advantaged individuals' perceptions of a social movement's legitimacy, resource mobilization, and network centrality influence their perceptions of intergroup threat and collective autonomy restriction as a social movement unfolds in real time.

Third, our model considers the psychological processes that push disadvantaged group members away from social movement mobilization (i.e., individual-focused system beliefs, comparisons, and management strategies), and motivate advantaged individuals to support social movements as allies (i.e., acceptance of privilege and a desire to repair the ingroup's reputation). Research interested in social movement efficacy may consider additional psychological and societal factors that: 1) increase social change beliefs among disadvantaged group members, and 2) increase acceptance of privilege among

advantaged group members. By better understanding these psychological processes, future research can test their efficacy in informing intervention designs that increase engagement and support for social movements that seek social equality.

Finally, it is important to acknowledge two constraints on generality of the present work. We review research examining a broad range of marginalized and privileged identities - including race, gender identity, sexual orientation, socioeconomic status, and immigration status – and the ways in which they influence perceptions of social hierarchy, inequality, collective autonomy, and collective action. However, much of this research treats identity as binary, such that individuals are categorized as either advantaged or disadvantaged based on a single dimension of their social identity, with little attention given to the intersection of multiple identities. An important question for future research to consider is how individuals with intersecting social identities, some of which may be privileged and others of which may be marginalized, experience collective autonomy and perceive and engage in collective action. It is also important to note that the empirical research we draw on was mostly conducted using participant samples from Western, Educated, Industrialized, Rich, and Democratic nations, which constrain the generality of the present theorizing. This constraint opens up an opportunity to test this model in non-WEIRD nations and cultures to identify how much of this model is generalizable and identify its boundary conditions. By doing so, we stand to gain a better understanding of whether, when, and how, the collective actions of individuals might change social hierarchies and structural inequality.

CHAPTER 3

**POLITICAL PARTISANSHIP SHAPES THE ASSOCIATION BETWEEN
COLLECTIVE AUTONOMY RESTRICTION AND RESPONSES TO
COVID-19 TO INFLUENCE HEALTH BEHAVIOR OVER TIME**

Abstract

Motivated social cognition suggests that polarization in public perception of science is driven by individuals' tendency to accept scientific information that supports their pre-existing political ideology and reject science that does not. The present research integrates insights from motivated cognition with emerging theories on collective autonomy restriction, which posit that individuals are motivated to preserve the freedom of one's ingroup to act in accordance with the group's worldview. We hypothesize that polarization in public perception of science across political lines results when science-informed policies are perceived to threaten the political autonomy of people's preferred political party. We further hypothesize that sensitivity to hierarchy threats makes Republicans more likely to experience collective autonomy restriction, and more likely to reject science-informed policies that challenge their party's position of power within the political hierarchy, compared to Democrats. We test these hypotheses in the context of the COVID-19 pandemic by using longitudinal data collected during the early months of the pandemic. Results indicate that Republicans were more likely to believe that their party's collective autonomy was restricted, compared to Democrats. Perceptions of collective autonomy restriction in turn predicted perceptions of COVID-19 and adherence to COVID-19 related health behaviors over time.

Introduction

Political polarization of seemingly apolitical issues related to science – such as climate change, vaccines, and most recently COVID-19 - has increased in the United States in recent decades (Dunlap et al., 2016; Gadarian et al, 2021; Hamilton et al., 2015). Attempts to identify important factors that contribute to such polarization of opinions related to the application of science to social issues has yielded several explanations at the psychological and institutional level. One explanation rooted in theories of motivated cognition argue that individuals are motivated to process information to maintain congruency between novel information and preexisting goals (Druckman, 2017; Druckman & McGrath, 2019; Kunda, 1990; Lodge & Taber, 2013). Applied to politics, this means that individuals are more likely to accept information that fits their political beliefs and reject information that does not (Druckman & Bolsen, 2011; Nisbet 2005; Nyhan & Reifler, 2010; Jost et al., 2022; Rekker, 2021). Because identification with political parties (Republicans or Democrats) parallel opposing political ideology (conservative or liberal), information that challenges the ideological platform central to one political party is likely to converge with the platform of the opposing political party, leading to polarization in public opinion (Lupton et al., 2020; Pew Research Center, 2014).

For example, research on science communication shows that Republicans and Democrats react negatively and resist scientific messages that conflict with their pre-existing political beliefs regarding issues such as climate change and evolution (among Republicans), and fracking and nuclear power (among Democrats) (Nisbet et al., 2015). Similarly, research examining political polarization over climate change suggests that

motivations to defend conservative economic ideals rooted in a free-market economy partially explains why Republicans are more likely to reject and counterargue scientific data linking climate change to industrial capitalism, compared to Democrats (Jenkins-Smith et al., 2020; Lewandowsky et al., 2013).

Individuals who strongly identify with their political party also engage in biased forms of information processing to maintain a positive group image (Jost et al., 2022; Ditto et al., 2019; Schwalbe et al., 2020). Individuals are likely to accept information that bolsters the reputation of their political ingroup and reject information that tarnishes ingroup reputation, which further contributes to polarization. In some situations, motivated social cognition leads Democrats and Republican to believe in factually false information that derogates the political outgroup. For example, one study found that ideological liberals were more likely to falsely believe that George W. Bush was on vacation when Hurricane Katrina destroyed New Orleans, while conservatives were more likely to falsely believe that Barack Obama shook hands with the President of Iran (Frenda, et al. 2013).

In sum, the desire to satisfy fundamental psychological needs – specifically, the need for cognitive consistency (Gawronski, 2012) and the need to maintain a positive ingroup image (Brewer, 1979; Tajfel & Turner, 1986) – activates motivated cognition that biases information processing and drives polarization of beliefs and behavior. Expanding this framework, we posit that other psychological motives not examined previously may also activate motivated social cognition and drive polarization. Specifically, we examine whether the psychological need to protect the ingroup’s autonomy (i.e., collective autonomy; Kachanoff, 2017) motivates Democrats and Republicans to reject scientific

information if it is perceived to restrict or constrain one's political party's autonomy. Furthermore, we examine whether greater ideological emphasis on power and hierarchy among Republicans compared to Democrats leads Republicans to experience more political autonomy restriction than Democrats.

The present research explores these hypotheses in the context of the COVID-19 pandemic (Clements, 2020; Gadarian et al, 2021; Geana et al., 2021). Using longitudinal survey data collected during the early months of the pandemic, we examined: i) whether Republicans were more likely to feel that their party's political autonomy was restricted than Democrats; ii) whether partisan differences in collective autonomy restriction predicted less perceived societal threat from COVID-19 and less concern about the national response among Republicans, compared to Democrats; and iii) whether less perceived threat and less concern about the nation's response motivated Republicans to reject COVID-19 health and safety guidelines set by the Center for Disease Control (CDC) to a larger degree than Democrats.

Collective Autonomy

Rooted in self-determination (Deci & Ryan, 2000; 2008) and social identity theories (Tajfel & Turner, 1986), collective autonomy refers to the psychological need to maintain or enhance one's group's ability to define and practice its beliefs, culture, and worldviews without interference from other social groups (Kachanoff et al, 2019; Kachanoff et al, 2020). When individuals perceive that their ingroup's collective autonomy is restricted by other groups, they are more likely to challenge the agents of restriction and engage in compensatory behaviors to re-assert their collective autonomy (Kachanoff et al, 2019; Kachanoff et al, 2020; Kachanoff et al., 2022). For example,

research examining the effect of collective autonomy restriction in the context of race found that Black Americans' perceptions of collective autonomy restriction were associated with greater support for collective action that challenge social systems that restrict them (Kachanoff et al., 2020). Inducing collective autonomy restriction with a minimal-group paradigms in laboratory experiments also reveals increased hostility towards outgroups perceived to be the source of in-group restriction (Kachanoff et al., 2020).

These findings led Kachanoff and colleagues (2022) to develop the “threat and defense” hypothesis of collective autonomy, which proposes that the looming threat of collective autonomy restriction motivates group members to defend their ingroup's collective autonomy by adopting attitudes and behaviors that challenge or resist external sources of autonomy control. Applying this theory to politics and responses to the pandemic, we propose that the psychological need to maintain the ingroup's political autonomy drives politicization of previously apolitical issues related to science, increasing polarization of public faith in science, health policies informed by science, and behavioral adherence to health and safety guidelines. In the context of the COVID-19 pandemic, we argue that a mix of intrinsic (e.g., conservative ideologies that endorse social hierarchy) and contextual (e.g., the Republican party's position within the political hierarchy when the pandemic started) factors made Republicans more likely to perceive the pandemic to threaten to their collective autonomy, compared to Democrats.

Republicans' vs. Democrats' Sensitivity to Collective Autonomy Restriction During the COVID-19 Pandemic

Existing research indicates that Republicans were more skeptical of COVID-19 related information from expert scientific sources, like the CDC, and more resistant to science-informed health policies that aimed to combat the spread of the virus in the early days of the pandemic (Ash et al., 2020; Clements, 2020; Gadarian et al., 2021; Geana et al., 2021). The reason for this partisan difference is less clear. One explanation might be that Republicans are less likely to trust science in general than Democrats. Another alternative explanation is that the distrust of science was specific to the COVID-19 pandemic and the broader social context at the time during the early days of the pandemic.

Research examining links between political partisanship and belief in science is mixed, generally supporting one of two competing hypotheses (Nisbet et al., 2015; Rekker, 2021). The *intrinsic* hypothesis argues that conservatives are more likely to embrace authoritarian and dogmatic personality traits and desire certainty and cognitive closure compared to Democrats, which make them less open to information that challenges their ideological worldview (Jost et al., 2003; Kruglanski, 2003; Nam et al., 2013; Shook & Fazio, 2009). In contrast, the *contextual* hypothesis proposes that Democrats and Republicans are equally likely to engage in motivated reasoning, and that the rejection of science depends on its implications for their party's position within the political hierarchy (Baron & Jost, 2019, Ditto et al., 2019; Kahan, 2012, 2016, Kahan et al., 2015).

In the present work, we propose that *both* intrinsic and contextual factors made Republicans feel that their political party's collective autonomy was restricted during the early months of the COVID-19 pandemic, compared to Democrats, and in turn motivated

them to reject COVID-19 information from expert sources like the CDC. Specifically, we argue that intrinsic factors – such as sensitivity to hierarchy threat – made Republicans more likely to perceive that their collective autonomy was restricted, compared to Democrats. At the same time, contextual factors unique to the COVID-19 pandemic – including political instability during Trump’s presidential term and criticism of the federal government’s handling of the pandemic – exacerbated concerns among Republicans that the pandemic threatened to restrict their collective autonomy.

Intrinsic Factors: Republican Sensitivity to Hierarchy Threat and Collective Autonomy

Several intrinsic factors that make Republicans’ sensitive to hierarchy threat are also predicted to increase Republican’s perceptions of collective autonomy restriction, compared to Democrats. At the structural level, past scholars have pointed to asymmetries in the distribution of organizational power within the Democratic versus Republican party (Feldman, 2003; Freeman, 1986; Grossmann & Hopkins, 2015; Koger et al., 2009; Nexon, 1971). The structure of the Republican party places greater emphasis on hierarchy-based distribution of power, compared to the structure of the Democratic party (Feldman, 2003; Grossmann & Hopkins, 2015, Nexon, 1971). According to Freeman (1986), in the Democratic party, power is relatively decentralized, such that it is held by multiple professional organizations that represent the political interests of multiple social groups from diverse backgrounds.¹ In comparison, in the Republican party, power tends to flow downward, such that party norms emphasize “falling in line” with a singular power center at the top of the political hierarchy (Freeman, 1986). In

¹ It is important to note that Freeman’s (1986) description of the structure and ideologies central to the Democratic party are ideals, and not necessarily reflected in the party’s history. Indeed, Freeman (1986) highlights that Democratic political elites have historically gatekept which social groups are allowed to influence the party’s political platform.

other words, where Democrats tend to emphasize the representation and inclusion of multiple social groups in politics under a “big tent”, Republicans tend to believe that the nation’s interests are best represented by a singular platform that fights for the interests of the “traditional” or “true” American (Freeman, 1986).

These differences in political party structure are also present in constituent ideology and attitudes towards social hierarchy (Dunwoody & Plane, 2019; Hetherington et al., 2009; Jost, 2017; Jost et al., 2007; Jost et al., 2017). It is well-documented that Republicans are more likely to endorse social dominance and other hierarchy legitimizing ideologies, compared to Democrats (Dunwoody & Plane, 2019; Hetherington et al., 2009). Research also indicates that conservative voters are more likely to endorse zero-sum beliefs, believing that a benefit for one group means a loss for another, and have greater need for cognitive closure (Chirumbolo et al., 2004; Davidai & Ongis, 2019; De Zavala et al., 2010; Ho et al., 2012; Panno et al., 2018; Pratto et al., 1994; Schnurer, 2017). This may explain why Republicans tend to be more sensitive to sociopolitical factors that threaten or challenge social hierarchy, compared to Democrats (Jost, 2017; Jost et al., 2007; Jost et al., 2017).

This threat sensitivity is reflected in Republicans’ (1) support for policies that protect political and social hierarchy, and (2) opposition to policies that *challenge* sociopolitical hierarchy. For example, research examining White Americans’ attitudes towards immigration policy shows that greater ideological conservatism predicts stronger sentiment that non-White immigrants threaten White Americans’ norms and values, access to economic and political resources, and safety and well-being, thereby challenging existing power hierarches based on race and class in the U.S. (Craig &

Richeson, 2014; Dunwoody & Plane, 2019; Major et al., 2018). In turn, perceived hierarchy threat motivates conservatives to protect it by resisting the source of the threat. For example, perceptions that Republicans' political power was being challenged by immigration predicted increased support for Trump in 2016 (Major et al. 2018) and support for anti-immigration policies in the U.S. (Craig & Richeson 2014; Dunwoody & Plane, 2019). Similarly, research examining Americans' attitudes towards marriage equality shows that Republicans and ideological conservatives are more likely to believe that same-sex marriage threatens to undermine conservative beliefs about the preeminent value of the "traditional family" and the "sanctity of marriage," that challenge existing hierarchies based on gender and sexual orientation (Fetner, 2001; Fetner, 2008; Sherkat et al., 2011). In turn, perceptions of threat are associated with greater opposition to same sex-marriage and support for same-sex marriage bans (Gaines & Garand, 2010; Van der Toorn et al., 2017; Sherkat et al., 2011). Finally, research examining the link between political ideology and climate change denial found that ideological conservatives were more likely to perceive the rise of environmentalism as a threat to American values, economy, and politics, which in turn predicted greater climate change denial and less support for environmental policy (Hoffarth & Hodson, 2016).

In sum, these findings indicate that Republicans are more sensitive to, and more likely to resist, challenges to social hierarchy compared to Democrats. In the present research, we hypothesize that this sensitivity to social hierarchy threat also make Republicans more susceptible to feeling that their collective autonomy is restricted. According to the "threat and defense" perspective of collective autonomy, a group's position within social hierarchy is an important predictor of perceived collective

autonomy restriction (Kachanoff et al., 2022). This is because greater access to power and status increases a group's ability to successfully assert their collective identity and resist unwanted influences that restrict them. Because Republicans are more likely to endorse social dominance beliefs and desire a favorable position within social hierarchies, we predict that they are more likely to feel that instability within the social hierarchy threatens their collective autonomy compared to Democrats.

Research from a cross-sectional study that examined the link between perceptions of collective autonomy restriction, hierarchy legitimizing ideologies, and desire for group power (in the context of racial hierarchy) partially supports this hypothesis (Kachanoff et al., 2022). Among White (i.e., advantaged) Americans, greater perceived collective autonomy restriction was associated with stronger endorsement of hierarchy legitimizing ideologies and greater desire for group power. Extending these findings to the political context, we hypothesize that conservative ideologies in favor of social hierarchy and social dominance make Republicans more likely to feel that their collective autonomy is threatened by social instability compared to Democrats. Given that the COVID-19 pandemic disrupted social hierarchy on a global scale, it provides a perfect context in which to test this hypothesis.

Contextual Factors: COVID-19 and Perceptions of Threat to the Political Hierarchy and Collective Autonomy

It is well documented that COVID-19 was a polarizing political issue in the U.S. as political conservatives were less concerned about the impact of COVID-19 on public health, less likely to support COVID-19 relief policies, and were less likely to follow health guidelines that aimed to slow COVID-19 infection rates, compared to liberals (Ash

et al., 2020; Clements, 2020; Gadarian et al., 2021; Geana et al., 2021). Research illuminating why the COVID-19 pandemic became so politically charged points to the role of news media in polarizing American's perceptions of the virus across political lines (Calvillo et al., 2020). From this research, it has become evident that two important contextual factors contributed to polarization.

The first factor was regarding the spread of (mis)information about the COVID-19 virus. While left-leaning news networks relied on scientific and medical experts to disseminate information about the virus to their viewers, right-leaning news networks relied on political sources to disseminate information that conflicted with scientific and medical sources (Calvillo et al., 2020; Funk et al., 2020; Hart et al., 2020; Motta et al., 2020). This may explain why Republicans (who were more likely to receive their information from right-leaning news networks) were more likely to believe factually incorrect information about the origin of the virus, the speed at which a vaccine could come to market, and the severity of the virus' symptoms, compared to Democrats (Jurkowitz & Mitchell, 2020; see also Funk et al., 2020).

The second factor which further polarized perceptions of COVID-19 was left- and right-leaning news networks' coverage of the Trump administration's handling of the COVID-19 pandemic. While left-leaning news networks were quick to criticize the Trump administration's handling of the pandemic (Drezner, 2020), right-leaning news networks promoted statements from the Trump administration that Democrats and the "liberal media" were using COVID-19 as a "political tool" to weaken the Republican Party (Halon, 2020) and impeach Trump (Stieb, 2020).

In the context of the pandemic, we hypothesize that Republicans' advantaged position within the political hierarchy at the start of the COVID-19 pandemic (i.e., a Republican president and Senate majority), compounded by their sensitivity to hierarchy threat and external criticism about the federal government's response to COVID-19, would make them more likely to feel that their collective autonomy was restricted compared to Democrats. Furthermore, we hypothesize that perceptions of collective autonomy restriction motivated Republicans to downplay the severity of the pandemic, despite alarming information from expert sources that argued the contrary. This rejection of the severity of the pandemic, in turn further explains why Republicans were less likely to follow CDC health guidelines during the early months of the pandemic.

Goals of the Present Research

Integrating the theory of collective autonomy with extant research on political polarization and motivated cognition, we propose the following novel hypotheses regarding the politicization and polarization of COVID-19. First, we hypothesized that Republicans would express greater perceptions of collective autonomy restriction during the early months of the COVID-19 pandemic compared to Democrats (**H1**). Second, we proposed that greater perceived collective autonomy restriction would predict the opinion that the national response to the COVID-19 pandemic was excessive (**H2a**), and that COVID-19 posed low threat to the American public (**H2b**), among Republicans but not Democrats. Third, believing that the national response to COVID-19 was excessive and that COVID-19 did not pose a significant threat to the American public would both, in turn, mediate the link between collective autonomy restriction and adherence to health behaviors among Republicans but not Democrats longitudinally (**H3**).

Method

Study Design

To test our hypotheses, we designed an online longitudinal survey to assess Americans' political party affiliation, perceptions of political collective autonomy restriction (i.e., CAR), opinions about COVID-19 (i.e., perceived appropriateness of that national response and perceived threat to the American public), and adherence to CDC recommended health behaviors. Data was collected in 3 waves during the early months (March – May 2020) of the COVID-19 pandemic. The first wave of data was collected at Time 1 (T1) from March 15th – March 20th, the second wave was collected at Time 2 (T2) from April 15th – April 20th, and the last wave was collected at Time 3 (T3) from May 15th – May 20th.

Participants

Participants were recruited via Amazon Mechanical Turk and compensated a total of \$6.75 for participating in a 15-minute survey at three separate times (\$0.75 at T1, \$2 at T2, and \$4 at T3). Inclusion criteria required all participants to be 18 years or older ($M_{age} = 38.03$, $SD = 11.98$), currently reside in the U.S., and able to read and write in English. Data were originally collected from 600 Americans. Of these, 76 failed our attention check at T1, leaving a sample of 524. At T2, 448 participants returned (85% retention) and at T3, 420 returned (80% retention).² Missing data was deleted listwise. Demographics for the sample at each time point can be found in Table 1.

² A sensitivity analysis was conducted to find the smallest effect we could detect for a one-way ANOVA with 3 groups (i.e., Democrats, Independents, Republicans), given the smallest sample at T3 ($N = 420$), $\alpha = .05$, and power = .80. Results indicate that a Cohen's $f = .152$ was the smallest effect size we could detect.

Table 1.

Demographic Information Measured at T1

	N	%
Political Affiliation		
Democrat	220	42.0
Independent	101	19.3
Republican	136	26.0
Gender		
Male	285	54.4
Female	238	45.4
Gender non-binary	1	0.2
Race		
White	375	71.7
Black	64	12.2
Hispanic	32	6.1
Asian/Pacific Islander	37	7.1
Indigenous	5	1.0
Multiracial	10	1.9

Note. 11 participants were indicated that they were not affiliated with either the Democratic, Independent, or Republican party.

Measures***Political Party Affiliation and Ideology***

Two separate items were used to measure participant's political party affiliation and ideology at T1, T2, and T3. First, participants were asked to indicate their party affiliation (i.e., Democratic, Republican, or Independent). Second, they indicated their political ideology on a continuous scale from 1 (Very Liberal) to 7 (Very Conservative) with midpoint 4 (Middle of the Road). We use political ideology when presenting correlations between our variables of interest. However, because extant research suggests that party affiliation is a more robust predictor of political attitudes than the single item of political ideology (Cohen, 2003; Carmines et al., 2012), we use political party affiliation as the moderator in our analyses. Results were similar regardless of whether the party affiliation (categorical variable) or political ideology (continuous variable) was used as a moderator (see Online Supplemental Analyses).

Collective Autonomy Restriction (CAR)

Eight items were adapted from Kachanoff et al. (2020) and included at T2 and T3 to measure participants' perceptions that their political group's collective autonomy is restricted by other groups: "Other groups have tried to control my political group"; "Other groups have tried to control what my political group can do"; "Other groups have tried to control what my political group should value and believe"; "Other groups have tried to control what customs and practices my political group should follow"; "In general, other groups try to control the extent to which my group can act in accordance with our political identity"; "In general, other groups try to control the extent to which my political group can follow our customs and practices"; "In general, other groups try to control the extent to which my political group can act in accordance with our political values"; "Other groups impose aspects of their political values on my political group's values". Participants indicated the extent to which they agreed with each statement on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree), with midpoint 4 (Neither Agree nor Disagree). Responses were averaged together, with higher scores indicating greater perceptions of CAR ($\alpha = .97$).

Perceived Threat From COVID-19 to the American Public

Two items were included at T1, T2, and T3 to examine participant's perceptions of the severity of threat that COVID-19 posed on the American public: "How dangerous is the coronavirus situation to the American people?"; "How worrisome is the coronavirus situation to the American people?". Items were answered on a scale of 1 (Not at All) to 7 (Very Much) with midpoint 4 (Somewhat). Participants' responses were

averaged together, with higher scores indicating greater perceptions of threat to the American public from COVID-19 ($\alpha = .89$).

Perceived Appropriateness of the National Response to COVID-19

Three items were included at T1, T2, and T3 to examine participant's perceptions of the appropriateness of the U.S.'s response to COVID-19: "To what extent do you think Americans are overreacting to the current coronavirus situation?" "To what extent do you think Americans are exaggerating the current coronavirus situation?" "Do you think the American government is doing enough to combat the spread?" Items were answered on a scale of 1 (Not at All) to 7 (Very Much) with midpoint 4 (Somewhat). Participants' responses were averaged together, with higher scores indicating greater perceptions that the Nations response to COVID-19 was excessive ($\alpha = .83$).

Adherence to COVID-19 Health Guidelines

We asked participants to indicate whether they followed the following health behaviors recommended by the Center for Disease Control at the start of the COVID-19 pandemic: "Wash your hands with soap and water for at least 20 seconds after being in a public place"; "Avoid touching your eyes, nose, and mouth with unwashed hands"; "Clean and disinfect frequently touched surfaces daily"; "Avoid gatherings of 10 or more people"; "Avoid shaking hands"; "Avoid public transportation"; "Avoid or decrease the time spent in public places". At each time point (T1, T2, T3), participants indicated whether they followed each guideline or not. The number of guidelines followed were summed together to obtain a score from 0 (no guidelines followed) – 7 (all guidelines followed).

Results

Correlations

Correlations between all variables are reported at each time point in Table 2. CAR was significantly correlated with political orientation at T2 and T3 (when CAR was measured) such that greater political conservatism was associated with greater perceptions of CAR. CAR was also significantly correlated with perceptions of threat from COVID-19 to the American public; perceptions of the appropriateness of the national response to COVID-19; and adherence to health behaviors at T2 and T3.

Table 2.

Correlations and Descriptive Statistics

Variables	Mean	SD	1	2	3	4	5
T1 (3/15/20 - 3/20/20)							
1. Political Ideology	3.55	2.02					
2. CAR	N/A	N/A	N/A				
3. COVID as a Political Tool	N/A	N/A	N/A	N/A			
4. Threat from COVID	5.52	1.40	-.14**	N/A	N/A		
5. Appropriate Response to COVID	3.44	1.75	.47***	N/A	N/A	-.44***	
6. Health Behaviors	5.79	1.70	-.16**	N/A	N/A	.29***	-.40***
T2 (4/15/20 - 4/20/20)							
1. Political Ideology	3.48	2.01					
2. CAR	4.50	1.74	.17**				
3. COVID as a Political Tool	3.08	2.01	.62***	.30***			
4. Threat from COVID	5.48	1.46	-.26***	-.06	-0.51***		
5. Appropriate Response to COVID	3.18	1.70	.52***	.17***	.80***	-.51***	
6. Health Behaviors	6.14	1.49	-.11*	-.03	-.27	.37***	-.35***
T3 (5/15/20 - 5/20/20)							
1. Political Ideology	3.47	1.97					
2. CAR	4.55	1.74	.13**				
3. COVID as a Political Tool	3.13	2.06	.63***	.30***			
4. Threat from COVID	5.30	1.53	-.34***	-.04	-.51***		
5. Appropriate Response to COVID	3.05	1.82	.56***	-.17***	.82***	-.59***	

6. Health Behaviors 5.27 1.30 -.21*** -.08 -.33*** .40*** -.43***

Note. Correlations and descriptive statistics provided for all available variables at T1, T2, and T3. N/A indicates that the correlation could not be ran because CAR was not measured at T1. * $p < .05$, ** $p < .01$, *** $p < .001$

Perceptions of CAR By Political Party Affiliation

Multiple regression was used to test whether political party affiliation predicted perceived CAR while controlling for age, gender, race, current residence (i.e., urban, suburban, rural), and participants’ financial stress (i.e., “During the COVID-29 pandemic, how would you rate your current financial situation?” 1 (very negative) to 7 (very positive), measured at T2). Consistent with H1, even after accounting for the covariates, Republicans were more likely to perceive that their political autonomy was restricted, compared to Democrats at T2 ($b_{rep} = .55, SE = .21, p = .008$) and T3 ($b_{rep} = .42, SE = .21, p = .050$). Regression coefficients for all variables in the model are presented in Table 3.

Table 3.

Regression Coefficients Predicting Perceptions of Political Collective Autonomy Restriction at T2 and T3.

	T2 CAR			T3 CAR		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Political Affiliation						
Republican	0.55	0.21	0.008	0.42	.21	.050
Independents	-0.06	0.2	0.768	-0.14	.23	.536
Covariates						
Age	0.03	0.01	<.001	0.03	.01	<.001
Gender	0.14	0.1	0.401	0.23	.17	.189
Race	0.07	0.2	0.727	-0.03	.21	.904
Region						
Urban	0.05	0.2	0.805	-0.07	.20	.713
Rural	-0.24	0.2	0.328	-0.47	.25	.059

Financial Situation	-0.09	0.0 5	0.099	-0.06	.06	.244
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Note. Political Affiliation was dummy coded with Democrats as the reference group. Race was dummy coded (0 = White, 1 = person of color). Region indicates participants place of residence as either rural, suburban, or urban and was dummy coded with suburban as the reference group.

The Association Between Collective Autonomy and Perceptions of COVID-19, Moderated by Political Affiliation

Two separate multiple regression analyses were conducted to test the hypothesis that greater perception of collective autonomy restriction measured at T2 was associated with: the opinion that the national COVID response was excessive (H2a); and that COVID-19 did not pose a serious threat to the American public (H2b) among Republicans but not Democrats. Continuous variables were mean centered and political affiliation was dummy coded with Democrats as the reference group.

The Association Between CAR and Perceived Appropriateness of the National Response to COVID-19, Moderated by Party Affiliation

At average levels of CAR, both Republicans ($b_{rep.} = 1.67, SE = .18, p < .001$) and Independents ($b_{ind.} = .96, SE = .20, p < .001$) were significantly more likely to express the opinion that the national response to COVID-19 was excessive compared to Democrats (the reference group). Among Democrats, there was no association between CAR and perceptions of the national response to COVID-19 ($b_{CAR} = -.08, SE = .06, p = .236$), however, Party x CAR interactions suggested there was a significant association between CAR and perceptions of the national response to COVID-19 among Republicans ($b_{(rep. \times CAR)} = .43, SE = .10, p < .001$) and Independents ($b_{(ind. \times CAR)} = .24, SE = .11, p = .034$). Further probing of these significant interactions indicated that experiencing greater perceptions of CAR was associated with stronger opinions that the national response to COVID-19 was excessive among Republicans (Conditional Effect for Republicans: b_{CAR}

= .35, $SE = .08$, $p < .001$), but not Independents (Conditional Effect for Independents: $b_{CAR} = .16$, $SE = .09$, $p = .078$). All regression coefficients predicting perceived appropriateness of the National Response to COVID-19 at T2 are reported in Table 4.

Table 4.

Regression Coefficients Predicting Perceived Appropriateness of National Response to COVID-19, Moderated by Party Affiliation

	<i>b</i>	<i>SE</i>	<i>p</i>
Intercept	2.41	0.11	<.001
CAR (T2)	-0.08	0.06	0.236
Independent	0.96	0.20	<.001
Republican	1.67	0.18	<.001
CAR x Independent	0.24	0.11	0.034
Conditional Effect for Independents	0.16	0.09	.078
CAR x Republican	0.43	0.10	<.001
Conditional Effect for Republicans	0.35	0.08	<.001

Note. Party affiliation was dummy coded with Democrats as the comparison group. CAR indicates the association between collective autonomy restriction and perceived appropriateness of the national response to COVID-19 among Democrats.

The Association Between CAR and Perceived Threat from COVID-19 to the American Public, Moderated by Party Affiliation

At average levels of CAR, both Republicans ($b_{rep.} = -.47$, $SE = .18$, $p = .009$) and Independents ($b_{ind.} = -.71$, $SE = .19$, $p < .001$) were significantly less likely to believe that COVID-19 posed a serious threat to the American public compared to Democrats (the reference group). Among Democrats, greater experience of CAR predicted marginally more perceived threat ($b_{CAR} = .12$, $SE = .06$, $p = .051$). Significant Party x CAR interactions suggested associations between CAR and perceived threat among Republicans ($b_{(rep. \times CAR)} = -.32$, $SE = .10$, $p = .002$) and Independents ($b_{(ind. \times CAR)} = -.35$, $SE = .11$, $p = .001$). Among both Republicans (Conditional Effect for Republicans: $b_{CAR} = -.20$, $SE = .08$, $p = .014$) and Independents (Conditional Effect for Independents: $b_{CAR} = -.23$, $SE = .09$, $p = .009$), greater experience of CAR was associated with less perceived

threat. All regression coefficients predicting perceived threat from COVID-19 to the American public at T2 are reported in Table 5.

Table 5.

Regression Coefficients Predicting Perceived Threat from COVID-19 to the American Public, Moderated by Party Affiliation

	<i>b</i>	<i>SE</i>	<i>p</i>
Intercept	5.75	0.11	<.001
CAR (T2)	0.12	0.06	.051
Independent	-0.71	0.19	<.001
Republican	-0.47	0.18	.009
CAR x Independent	-0.35	0.11	.001
Conditional Effect for Independents	-0.23	0.09	.009
CAR x Republican	0.32	0.10	.002
Conditional Effect for Republicans	-0.20	0.08	.014

Note. Party affiliation was dummy coded with Democrats as the comparison group. CAR indicates the association between collective autonomy restriction and perceived threat from COVID-19 to the American public, among Democrats.

Moderated Mediation: Perceptions of COVID-19 Mediate the Link Between CAR and Adherence to Recommended Health Behaviors, Moderated by Party Affiliation

We ran a moderated parallel mediation model with the PROCESS Version 3.4 macro for SPSS (Hayes, 2017) to test the following hypothesis (H3). The opinion that the national response to COVID-19 was excessive (T2), and that COVID-19 did not pose a significant threat to the American public, would mediate the link between collective autonomy restriction (T2) and adherence to health behaviors (T3), among Republicans but not Democrats, over time (see Figure 2).³ Significant moderated mediation was determined through the interpretation of the index of moderated mediation on the difference between the conditional indirect effects (IE) of each political party using a bootstrap approach (5,000 iterations) to obtain 95% confidence intervals (CIs).

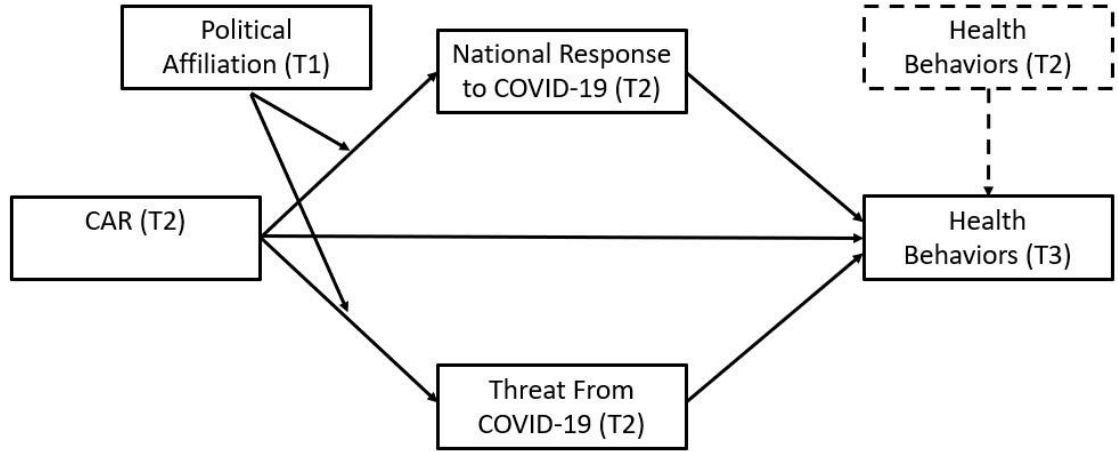
³ Participant health behaviors at T2 were included as a covariate predicting health behaviors at T3. Party affiliation was dummy coded with Democrats as the reference group. All continuous variables were centered.

Significant moderation was further probed by examining the IE among Democrats, Independents, and Republicans, again using a bootstrap approach (5,000 iterations) to obtain 95% CIs.

Results from this analysis found that believing that the national response to COVID-19 was excessive at T2 significantly predicted less adherence to recommended health behaviors at T3 ($b_{\text{overreaction}} = -.14, SE = .04, p < .001$), while controlling for health behaviors at T2 ($b_{\text{health}} = .48, SE = .04, p < .001$). Perceived threat from COVID-19 to the American public at T2 did not significantly predict adherence to health behaviors at T3 ($b_{\text{threat}} = .07, SE = .04, p = .096$). Furthermore, the direct effect of CAR at T2 did not significantly predict adherence to health guidelines at T3 ($b_{\text{CAR}} = -.03, SE = .03, p = .315$). However, a significant index of moderated mediation comparing Republicans to Democrats justified further probing of the conditional indirect effect through perceived overreaction in national response (index of moderated mediation_{rep.} = $-.06, SE = .02, 95\% \text{ CI } [-.11, -.02]$). Consistent with our moderated mediational hypothesis (H3), the conditional indirect effect of CAR on health behaviors via beliefs that the national response to COVID-19 was excessive was significant for Republicans (IE_{Rep.} = $-.05, SE = .02, 95\% \text{ CI } [-.09, -.02]$), but not among Independents (IE_{Ind.} = $-.02, SE = .02, 95\% \text{ CI } [-.06, .01]$), or Democrats (IE_{Dem.} = $.01, SE = .01, 95\% \text{ CI } [-.01, .03]$). Neither the indirect effect, nor the indices of moderated mediation, of CAR on health behaviors via perceived threat from COVID-19 were significant. Model coefficients for all pathways are reported in Table 6.

Figure 2.

Moderated Parallel Mediation: Perceptions of COVID-19 Mediate the Link Between CAR and Health Behaviors.



Note. Conceptual model illustrating moderated parallel mediation of collective autonomy restriction (CAR) at T2 predicting adherence to health behavior (Health Behaviors) at T3, via perceptions of the appropriateness of the national response to COVID-19 (National Response to COVID-19) at T2 and perceptions of threat from COVID-19 to the American public (Threat From COVID-19) at T2. Mediators were tested in parallel, controlling for one another, as well as the direct effect of CAR, and adherence to health behaviors at T2 (added to the model as a covariate, indicated by the dashed box and arrow). Model coefficients for all pathways are reported in Table 6.

Table 6.

Pathway Coefficients for Parallel Moderated Mediation

Political Affiliation	Mediation Through National Response to COVID-19				Mediation Through Threat from COVID-19			
	a ₁	b ₁	c'	IE	a ₂	b ₂	c'	IE
Democrat	-0.07	-0.14*	-0.03*	0.01 [-0.01, 0.03]	0.12	-0.07	-0.03*	0.01 [-0.00, 0.03]
Independent	0.16	-0.14*	-0.03*	-0.02 [-0.06, 0.01]	0.23*	-0.07	-0.03*	-0.02 [-0.05, 0.01]
Republican	0.35**	-0.14*	-0.03*	-0.05 [-0.09, -0.01]	0.23*	-0.07	-0.03*	-0.01 [-0.04, 0.01]

Note. Coefficients and conditional indirect effects (IE) are displayed for all pathways separately for Democrats, Independents, and Republicans. 95% confidence intervals are in square brackets, rounded to the nearest hundredth. 95% confidence intervals that do not include zero are significant. *p < .05. **p < .001.

Discussion

The present study examined whether the experience of collective autonomy restriction differed between Republicans and Democrats, and whether these differences drove the polarization of opinions toward COVID-19 across political lines. In support of our first hypothesis, Republicans were more likely to believe that other political groups restricted their collective autonomy, compared Democrats. Correlations between political orientation and perceptions of collective autonomy restriction also supported this hypothesis, such that greater ideological conservatism was associated with greater experience of collective autonomy restriction at T2 and T3.

One interpretation of these results is that hierarchy enhancing ideologies associated with political conservatism made Republicans more sensitive to external factors that threaten collective autonomy. While this interpretation is consistent with intrinsic hypotheses of political polarization, it is important to acknowledge that our study did not include measures of social dominance orientation, right wing authoritarianism, or similar scales to directly test associations between hierarchy enhancing ideologies and experience of collective autonomy restriction. While we acknowledge this limitation, recent research on collective autonomy in the context of race has shown that greater endorsement of social dominance is associated with greater perceptions of collective autonomy restriction among White Americans (Kachanoff et al., 2022). While these findings are consistent with our interpretation of results, future research should directly examine which specific political ideologies are associated with the experience of collective autonomy restriction to better understand the link between conservatism and collective autonomy restriction in the political context.

Differences in collective autonomy restriction across party lines may also have been driven by contextual factors specific to the context of the COVID-19 pandemic. As previously mentioned, the Republican Party held executive office and a Senate majority at the time of data collection. The COVID-19 pandemic began after the contentious 2016 presidential election and close to the subsequent presidential election cycle of 2020. During this time, scrutiny of the Republican party and the Trump administration's handling of the deadly virus raised concerns among Republicans that Trump's re-election campaign was threatened. From the perspective of the "threat and defense" hypothesis (Kachanoff et al., 2022), the threat of losing the 2020 election and conceding political power to Democrats likely exacerbated perceptions of collective autonomy restriction among Republicans. Unfortunately, our study - which was developed and conducted in response to the pandemic as it unfolded in real time - did not measure perceptions of collective autonomy restriction prior to the federal government's implementation of lockdown orders to prevent the spread of COVID-19 (March 15, 2020). Without pre-pandemic baseline measures of collective autonomy, it remains unclear whether contextual factors specific to the COVID-19 pandemic (such as criticism of Trump's response to the pandemic) increased perceptions of collective autonomy restriction among Republicans compared to pre-pandemic levels. If these contextual factors did influence Republican's perceptions of collective autonomy restriction, then it raises questions as to what might have happened if the political positionality of the Republican and Democratic parties were reversed. In other words, if the Democratic party had been in power when the pandemic unfolded, would criticism of their administration's handling of the pandemic similarly induce collective autonomy restriction among Democrats? One

way that future research can examine this question while simultaneously testing the contextual hypothesis is to examine whether exposure to political criticism aimed at one's political party increases perceptions of collective autonomy restriction during the upcoming 2024 presidential election. It would be interesting to see whether the pattern of results changes or remains similar to the results reported here.

One advantage of our study design is that it allowed us to capture participants' perceptions of the pandemic as it unfolded in real time. Consistent with previous research (Ash et al., 2020; Clements, 2020; Gadarian et al., 2021; Geana et al., 2021), we found evidence of political polarization in both perceptions of threat from COVID-19, and the appropriateness of the national response to COVID-19. Specifically, Republicans were less likely to believe that COVID-19 posed a significant threat to the American public, and more likely to believe that the national response to the pandemic was excessive, compared to Democrats. Furthermore, and in support of our second hypothesis, these perceptions were exacerbated by experience of collective autonomy restriction among Republicans, but not Democrats. Consistent with extant theories on motivated cognition (Jost et al., 2022) and the "threat and defense" hypothesis, these findings are some of the first to suggest that the fundamental desire to preserve autonomy at the group level may motivate group members to reject information that threatens to restrict the collective autonomy of the group. In the context of the COVID-19 pandemic, criticism of the Republican party's handling of the COVID-19 pandemic may have motivated Republicans to reject information about the severity of the pandemic in an attempt to preserve their advantaged position in the political hierarchy, and by extension preserve their collective autonomy.

Finally, the longitudinal design of our study allowed us to test whether perceptions of collective autonomy restriction influenced behavior over time. In support of (H3), we found that greater perceptions of COVID-19 were associated with greater beliefs that the national response was excessive, which in turn predicted less adherence to COVID-19 health guidelines, but only among Republicans. Perceived threat from COVID-19, however, did not predict adherence to health guidelines among Republicans (or any other political party), suggesting that while perceptions of collective autonomy restriction were associated with both perceptions of threat and appropriateness of response, only the latter influence adherence to health guidelines, and only among Republicans.

While the findings reported here are specific to the COVID-19 pandemic, the broader implications highlight the desire to protect collective autonomy as a fundamental psychological process that intersects with political identity to influence our perceptions and behaviors. In furthering our understanding of the psychological processes that drive polarization, we better equip ourselves to find common ground in a political climate that has become increasingly divided across political lines.

Supplemental Analysis

Perceptions of COVID-19 and Adherence to Health Guidelines Across Political Lines

While not central to our hypotheses, we ran a one-way ANOVA to examine whether perceptions of COVID-19 (i.e., perceived threat from COVID-19 to the American public, and perceived appropriateness of the nation's response to COVID-19) and adherence to health guidelines differed across political party affiliation.

Results indicated that perceived threat from COVID-19 to the American public significantly differed as a function of political affiliation at T1 ($F(2,454) = 3.40, p < .001$, Cohen's $f = .132$), T2 ($F(2,403) = 8.23, p < .001$, Cohen's $f = .206$), and T3 ($F(2,380) = 16.01, p < .001$, Cohen's $f = .303$). Follow-up independent t-tests with Bonferroni corrections indicated that Republicans were significantly less likely to perceive COVID-19 as a threat to the American people, compared to Democrats at T2 and T3. Group means and p-values for pairwise comparisons can be found in Supplemental Table 7.

Results indicated that perceptions of the appropriateness of the national response to COVID-19 significantly differed across political affiliations at T1 ($F(2, 454) = 40.36, p < .001$, Cohen's $f = .458$), T2 ($F(2, 403) = 50.92, p < .001$ Cohen's $f = .563$), and T3 ($F(2, 380) = 60.43, p < .001$, Cohen's $f = .647$). Follow-up independent t-tests with Bonferroni corrections indicated that Republicans were significantly more likely to perceive that the nation's response to COVID-19 was excessive, compared to both Democrats and Independents at all three time points. Group means and p-values for pairwise comparisons can be found in Supplemental Table 7.

Finally, results indicated that adherence to COVID-19 health guidelines significantly differed as a function of political party affiliation at T1 ($F(2, 454) = 4.52, p < .011, \text{Cohen's } f = .144$) and T3 ($F(2, 380) = 8.46, p < .001, \text{Cohen's } f = .217$). Differences in adherence to health guidelines based on political party affiliation were marginal at T2 ($F(2,403) = 2.85, p = .06, \text{Cohen's } f = .124$). Follow-up independent t-tests with Bonferroni Corrections indicated that Republicans were significantly less likely to adhere to health guidelines than Democrats at T1 and T3. Group means and p-values for pairwise comparisons can be found in Supplemental Table 7.

Table 7.

Group Means by Political Party and T-test Comparisons

Variables	T1				T2				T3			
	Dem.	Ind.	Rep.	p-value	Dem.	Ind.	Rep.	p-value	Dem.	Ind.	Rep.	p-value
CAR	N/A	N/A	N/A		4.34(.13)	4.25(.19)	4.92(.17)		4.46(.13)	4.29(.18)	4.94(.16)	
Comparison												
Rep. - Dem.				N/A				0.019				0.071
Rep. - Ind.				N/A				0.028				0.028
Dem. - Ind.				N/A				0.999				0.999
Threat from COVID	5.71(.09)	5.30(.14)	5.38(.12)		5.74(.11)	5.10(.16)	5.20(.14)		5.74(.11)	4.91(.16)	4.87(.14)	
Comparison												
Rep. - Dem.				0.089				0.008				< .000
Rep. - Ind.				0.999				0.999				0.999
Dem. - Ind.				0.045				0.003				< .000
Nation's Response to COVID	3.34(.16)	4.44(.14)	2.42(.11)		3.33(.17)	3.33(.17)	4.24(.15)		2.24(.12)	3.23(.17)	4.33(.15)	
Comparison												
Rep. - Dem.				< .000				< .000				< .000
Rep. - Ind.				< .000				< .000				< .000
Dem. - Ind.				0.039				< .000				< .000
Health Behaviors	5.88(.17)	5.43(.14)	6.40(.11)		5.87(.16)	5.87(.16)	6.07(.14)		5.54	5.01	5.00	
Comparison												
Rep. - Dem.				0.010				0.182				0.001
Rep. - Ind.				0.123				0.999				0.999
Dem. - Ind.				0.999				0.019				0.004

Note. Means and standard errors provided for democrats (Dem.), independents (Ind.), and republicans (Rep.). Significant pairwise comparisons for $p < .05$. N/A = not applicable.

Moderated Mediation: Perceptions of COVID-19 Mediate the Link Between CAR and Adherence to Health Guidelines, Moderated by Political Orientation

We ran a moderated parallel mediation model with the PROCESS Version 3.4 macro for SPSS (Hayes, 2017) to see whether parallel mediation model remained significant when moderated by political orientation instead of party affiliation. This model was identical to the parallel moderated mediation model reported in the main manuscript, with the exception that we used political orientation as the moderator. Results from this analysis were consistent with the findings reported in the main manuscript. Coefficients and conditional effects are reported separately for Liberals, Moderates, and Conservatives in Supplemental Table 8.

Table 8.

Parallel Mediation Moderated by Political Orientation

Political Orientation	Mediation Through National Response to COVID-19				Mediation Through Threat from COVID-19			
	a ₁	b ₁	c'	IE	a ₂	b ₂	c'	IE
Liberal	-0.06	-0.13**	-0.03	0.01 [-0.01, 0.03]	.06	0.07	-0.03	0.00 [-0.01, 0.02]
Moderate	0.10*	-0.13**	-0.03	-0.01 [-0.03, -0.00]	-.06	0.07	-0.03	-0.00 [-0.02, 0.00]
Conservative	0.27**	-0.13**	-0.03	-0.04 [-0.07, -0.01]	-0.17**	0.07	-0.03	-0.01 [-0.04, 0.03]

Note. Coefficients and conditional indirect effect (IE) are displayed for all pathways at three level of political orientation: -1SD (Liberal), Mean (Moderate), and +1SD (Conservative). 95% confidence intervals are in square brackets. 95% confidence intervals that do not include zero are significant. *p < .05. **p < .001.

CHAPTER 4
RACIAL/ETHNIC COLLECTIVE AUTONOMY RESTRICTION AND
TEACHER FAIRNESS: PREDICTORS AND MODERATORS OF STUDENT'S
PERCEPTIONS OF TEACHER SUPPORT

ABSTRACT

The link between intrinsic motivation support from teachers (i.e., teacher support), academic motivation, and academic performance is well documented. However, evidence suggests that racial/ethnic minority students are less likely to perceive support from adults at school, compared to White students. Several factors impact minority students' perceptions of teacher support and motivation. The present study examines whether students' perceptions of race/ethnic based collective autonomy restriction (i.e., the extent to which an individual feels that other groups try and restrict their racial/ethnic groups' freedom to define and express their own social identity) and fair treatment from teachers influence these outcomes. Drawing on data from middle and high school students (N=110), the present study found that racial/ethnic minority students reported greater perceptions of collective autonomy restriction, compared to White students, which mediated the link between students' racial/ethnic identity and perceived teacher support. Furthermore, past experiences with fair treatment from teachers were found to buffer the link between collective autonomy restriction and perceptions of teacher support. The practical implications of these findings for educators to better support students from underrepresented racial/ethnic backgrounds are discussed.

Introduction

Intrinsic motivation, or the motivation to engage in behavior to derive personal satisfaction, plays a critical role in students' academic development. For example, students who feel intrinsically motivated to learn - whether to satisfy their own curiosity or to achieve their long-term academic goals - tend to exhibit greater self-efficacy, engagement, motivation, and performance within the classroom (Chirkov, 2009; Jang et al., 2009; Reeve et al., 2004; Ryan & Deci, 2013). Within the classroom, teachers can help support intrinsic motivation development by tailoring the learning experience around their students' learning interests and preferences (Deci et al., 1981; Ryan & Deci, 2013; Kusurkar *et al.*, 2013; Reeve et al., 2004). Yet research continuously finds that students from underrepresented racial/ethnic minority (URM) backgrounds (e.g., Black, Indigenous, and Latinx students) are less likely to feel supported in educational settings compared to their White peers (Cabrera et al., 1999; Bottiani *et al.*, 2016).

Extant research on educational racial/ethnic disparities emphasizes the impact that school-level factors (e.g., culturally exclusive school climates, discriminatory experiences with teachers and peers, etc.) can have on URM students' perceptions of support (Benner & Graham, 2013; Byrd & Chavous, 2011; Smith et al., 2020). In addition to these school-level factors, socio-structural factors that restrict URM students' access to quality education (e.g., red lining, racial segregation, economic inequality, stereotypes, etc.) can lead URM students to believe that they "don't belong" in academic environments (Oyserman et al., 2011; Oyserman & Destin, 2010; Oyserman & Lewis, 2017). What remains unclear, however, is whether URM students' awareness of socio-structural factors that restrict their racial/ethnic group within the broader U.S. influences their

perceptions of their teachers as supportive of their intrinsic motivational development. In the present study, we explore this question by examining whether students' perceptions of their racial/ethnic groups' collective freedom to define and practice their own social identity within the U.S. (i.e., collective autonomy) is linked to their perceptions of their teachers as supportive of their intrinsic motivational needs within the classroom. We also examine whether positive interactions with teachers and adults at school influence the potential link between students' perceptions of collective autonomy, and intrinsic motivational support from teachers.

Racial/Ethnic Collective Autonomy

Racial/ethnic collective autonomy refers to the perception that one's racial/ethnic group is free to define and practice its own social identity and culture without interference from other racial/ethnic groups (Kachanoff, 2017). Within the U.S., the unequal distribution of power and resources based on social hierarchy puts racial/ethnic minorities at greater risk of experiencing collective autonomy restriction by others (Kachanoff, et al, 2019). As a nation, the U.S. is still reckoning with the impact that slavery, genocide, and racial/ethnic segregation has had on modern policies that perpetuate racial/ethnic inequality at a systemic level. Policies such as the "show me your papers" law in several states (Maggio, 2021); America's "war on drugs" (Fellner, 2009); Trump's Muslim ban (Collingwood et al., 2018); and exclusionary zoning practices (Shertsez et al., 2022; McGahey, 2021) are just a few examples of how institutions of power enact policies that restrict the rights of people of color in the U.S. At the cultural level, forced assimilation to White-Christian American norms, customs, traditions, and values further restricts racial/ethnic minority groups' freedom to practice their culture

(Comas- Díaz & Greene, 1994; Davis, 2001; Little, 2017; Mitchell, 2017; Padilla, 2019; Tamura, 2002). Considering these pervasive race/ethnic-based inequalities, it is unsurprising that members from racial/ethnic minority groups report greater perceptions of collective autonomy restriction, compared to racial majority group members (Kachanoff et al., 2019). In turn, experiencing collective autonomy restriction has been shown to negatively impact feelings of personal autonomy, self-esteem, and psychological well-being among adults from marginalized groups (Kachanoff et al., 2019; Kachanoff et al., 2021). However, no research has investigated the impact that perceptions of collective autonomy restriction have on the well-being and academic motivations of adolescents from racial/ethnic minority backgrounds.

Uncharted Waters: Adolescence and Collective Autonomy Restriction

Adolescence is a developmental period when social identity arguably becomes most salient, as youth continue to explore and define their sense of self as they transition into young adulthood (Coleman, 1974; Huynh & Fuligini, 2010; Steinberg & Silverberg, 1986). Relatedly, adolescents of color tend to be hypervigilant towards identity-based discrimination and prejudice, both experienced at the personal level, as well as vicariously through witnessing another individual with a shared social-identity being discriminated against (Agnew, 2002; Louie & Upenieks, 2022; Tarrant et al., 2001; Williams & Mohammad, 2009). Because of this hypervigilance, adolescents of color are likely aware and sensitive to the socio-structural factors in the U.S. that restrict their collective autonomy. Despite these implications, no research has examined adolescent perceptions of collective autonomy restriction, or the downstream consequences on their well-being. Furthermore, given that autonomy plays a critical role in shaping students'

academic experiences and motivation, we argue that perceptions of collective autonomy restriction may also influence the experience of adolescents of color within the classroom. Specifically, we hypothesize that experiencing racial/ethnic collective autonomy restriction likely influences student perceptions that their teachers are unsupportive of their intrinsic motivational needs within the classroom. We also examine whether a history of positive interpersonal interactions at school (operationalized as fair treatment from teachers and adults at school) buffers potential links between students' perceptions of collective autonomy restriction, and perceptions of intrinsic motivational support from teachers.

Teacher Fairness: A Potential Moderator

It is well documented that “fairness” in the classroom (i.e., grading, discipline, and communication) can help foster positive interpersonal relationships between teachers and their pupils (Chory, 2007; Lowman 1984; Walsh & Maffei, 1994). For example, students are generally more satisfied with their teacher’s instructional practices, more likely to believe their teachers have their best interest in mind, and place greater trust in teachers, when they perceive the teacher treats their students in a fair and just manner (Clayson & Haley, 1990; Feldman, 1989; Gregory & Ripski, 2008; Houston & Bettencourt, 1999; Rodabaugh & Kravitz, 1994). In turn, positive teacher-student relationships can increase academic motivation, achievement, and sense of belonging in school (Allen et al., 2021; Hughes, 2011). Research further suggests that students’ racial/ethnic identity adds an additional layer of nuance to our understanding of teacher fairness. On the teacher-behavioral end, racial biases can lead teachers to unintentionally treat students unfairly based on their racial/ethnic identity (Glock & Kovacs, 2013; Inan-

Kaya & Rubie-Davies, 2022; Okonofua et al., 2016; Tenenbaum & Ruck, 2007). At the same time, awareness of the potential of being treated unfairly by teachers based on one's racial identity can make URM students hypervigilant to unfair treatment from teachers (Kaufman & Killen, 2022; Crystal et al., 2010) and may lead them to attribute ambiguous interactions with teachers as racially motivated (Rivera-Rodriguez, 2021). As such, fair treatment from teachers may carry an additional benefit for URM students, such that it breaks negative expectations that these students may have regarding how they may be treated by teachers and other adults at school. Thus, in the current study, we argue that past exposure to fair treatment from teachers and other adults in schools can help buffer the potentially negative impact of collective autonomy restriction on students' perceptions of teacher support.

The Current Study

The goals of the current study were to examine whether perceptions of collective autonomy restriction differed by students' racial/ethnic identity, and to see whether experiencing collective autonomy restriction shaped perceptions of teacher support. We also examined whether previous exposure to fair treatment from teachers and adults attenuated the link between collective autonomy restriction and perceptions of teacher support. Drawing on cross-sectional data from middle and high school students ($N = 110$), we tested the following hypotheses. First, students from URM backgrounds will report greater perceptions of collective autonomy restriction, compared to White students (**H1**). Second, greater perceptions of collective autonomy restriction will mediate the link between student's racial/ethnic identity and perceived teacher support, such that URM students will be more likely to feel racial ethnic collective autonomy restriction

(compared to White students), which in turn will predict less perceived intrinsic motivation support from teachers (**H2**). Third, previous exposure to fair treatment from teachers will buffer the negative association between perceived collective autonomy restriction and perceived teacher support (**H3**).

Method

Study Design

An online survey was used to assess students' perceptions of collective autonomy restriction, perceptions of intrinsic motivation support from their current teacher, and previous exposure to fair treatment from teachers. The survey was administered through our research-partner school during the fall semester of the 2020-21 school year between the dates of October 15th-18th, as part of a broader longitudinal study. At the time of data collection, the school had adopted a remote-learning model because of the COVID-19 pandemic and social distancing mandates.

Participants

We recruited middle and high school students from a public K-12 charter school in the Northeastern United States. We sought out parental consent from all middle and high school students at the beginning of the year. All students who obtained parental consent were invited to participate in our survey. Of those invited, a total of 110 students assented to participate in our survey. Students received either a \$5 Amazon Gift Card or \$5 PayPal payment as compensation for each survey they completed across the year. Participant demographic information is reported in Table 9.

Table 9.

Student Demographics

	N	Percentage
Gender Identity		
Male	49	47.6
Female	49	47.6
Non-Binary	3	2.9
Preferred Not to Answer	9	1.9
Race/Ethnicity		
Black or African-American	3	2.7
Asian	12	10.9
Hispanic	5	4.5
White	64	58.2
Multi-Racial	15	13.6
Other	1	0.9
Preferred Not to Answer	10	9
Grade		
Middle School	54	49.1
High School	49	44.5

Note. Students who preferred not to provide their racial/ethnic identity were omitted from our analysis. We also omitted the one student who selected “other” when providing their racial/ethnic identity from our analysis because we were unable to code their racial/ethnic identity. Grade demographics were missing for 7 students.

Measures

A list of all items used for each measure is provided in the Supplemental Information section (SI).

Collective Autonomy Restriction

We adapted 6 items from Kachanoff et al. (2020) to measure student’s experiences of racial/ethnic collective autonomy restriction. An example item includes the following: “In the U.S., people from other groups (e.g., racial/ethnic groups, political group, religious groups, etc.) have tried to control us.”. Students indicated the extent to which they agreed with each statement on a scale from 1 (Strongly Disagree) to 7 (Strongly

Agree), with midpoint 4 (Neither Agree nor Disagree). Responses were averaged together, with higher scores indicating greater collective autonomy restriction ($\alpha = .95$).

Intrinsic Motivation Support

We adapted 14 items from the learning climate questionnaire (Williams & Deci, 1996) to measure students' perceptions of intrinsic motivation support from their teachers during the 2020-21 school year. An example item includes the following: "I felt that my teachers provided me with choices and options". Students indicated the extent to which they agreed with each statement on a scale of 1(Strongly Disagree) to 7 (Strongly Agree), with midpoint 4 (Neither Agree nor Disagree). Responses were averaged together, with higher scores indicating greater perceptions of intrinsic motivation support from teachers ($\alpha = .95$).

Fair Treatment from Teachers and Adults at School

A subset of 7 items were adapted from Cohen's Climate Survey (Yeager et al., 2017) to measure students' past experiences with fair treatment from teachers and adults at school. An example item includes the following: "In the past, my teachers at school had a fair and valid opinion of me". Students indicated the extent to which they agreed with each statement on a scale of 1(Strongly Disagree) to 7 (Strongly Agree), with midpoint 4 (Neither Agree nor Disagree). Responses were averaged together, with higher scores indicating more frequent experiences of fair treatment from teachers and adults at school in the past. (T1: $\alpha = .88$).

Results

In the following analyses, student race was dummy coded (0 = White, 1 = URM). The racial category URM included students who self-reported as Black, Asian, Hispanic, and Multiracial. The decision to group these racial/ethnic identities into the single category “URM” for our analysis was driven by the small sample size for each individual racial/ethnic category. We provide descriptive statistics for all dependent variables, separately for each racial/ethnic category, in Table 10. All analyses used listwise deletion to address missing data.

Table 10.

Descriptive Statistics for Dependent Variables by Racial/Ethnic Identity

	N	CAR		IMS		Fair Treatment	
		Mean	SD	Mean	SD	Mean	SD
Race/Ethnicity							
Black	3	4.94	.75	4.14	.26	4.91	.81
Asian	12	4.02	1.29	5.84	.55	5.84	.76
Hispanic	5	4.98	.48	5.39	.91	5.54	1.01
Multi-Racial	15	4.03	1.44	4.92	1.38	5.36	1.43
White	64	2.41	1.26	5.41	.92	5.47	1.07

Student Perceptions of Collective Autonomy Restriction

Multiple Regression was used to test whether perceptions of collective autonomy restriction differed by students’ racial/ethnic identity, while controlling for gender (dummy coded: 0=Male, 1=Female), grade, and mean neighborhood income (mean centered) ($R^2 = .38$, $F(4, 80) = 13.77$, $p < .001$).⁴ In support of hypothesis 1, URM students were significantly more likely to experience racial/ethnic collective autonomy restriction compared to White students ($b_{\text{Race}} = 1.93$, $SE = .29$, $p < .001$). Student gender

⁴ Mean neighborhood income was derived from 2020 census data, and primary residential zip codes provided by each student. Note that 16 students did not provide their zip code.

was associated with perceptions of collective autonomy restriction, such that self-identified female students reported experiencing greater racial/ethnic collective autonomy restriction compared to male students ($b_{\text{Gender}} = 0.66, SE = .27, p = .017$). Mean neighborhood income and student grade were not associated with collective autonomy restriction ($b_{\text{Income}} = -0.07, SE = .14, p = .625; b_{\text{Grade}} = .04, SE = .07, p = .544$).

Student Perceptions of Intrinsic Motivational Support

Multiple regression was used to test whether student's perceptions of collective autonomy restriction were associated with perceptions of intrinsic motivational support from teachers, while controlling for student race, gender, and grade ($R^2 = .07, F(2, 88) = 13.77, p = .053$). Consistent with hypothesis 2, greater perceptions of collective autonomy restriction were related to less perceptions of intrinsic motivational support from teachers ($b_{\text{CAR}} = -.17, SE = .08, p = .030$). Race, gender, and grade were not associated with students' perceptions of teacher support ($b_{\text{Race}} = 0.06, SE = .24, p = .785; b_{\text{Gender}} = 0.11, SE = .19, p = .810; b_{\text{Grade}} = -0.01, SE = .05, p = .572$).

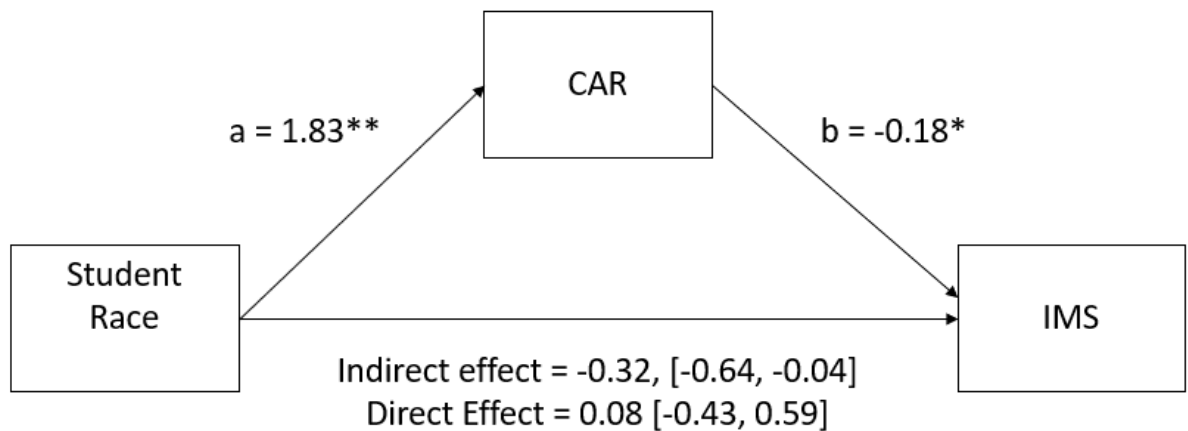
Mediation Analysis: Perceptions of Collective Autonomy Restriction Mediate the Link Between Student's Racial/Ethnic Identity and Teacher Support

We ran a mediational model with the PROCESS Version 3.4 macro for SPSS (Hayes, 2017) to test whether collective autonomy restriction mediated the link between student race/ethnicity and perceived teacher support. Significant mediation was determined through the interpretation of the indirect effect (IE) using a bootstrap approach (5,000 iterations) to obtain 95% confidence intervals (CIs). Consistent with hypothesis 3, collective autonomy restriction mediated the association between student

race/ethnicity and teacher support (IE = -0.32 , 95% CI $[-0.64, -0.03]$; see Figure 3). Specifically, URM students were more likely to feel that their racial/ethnic collective autonomy was restricted (compared to White students), which in turn was associated with less perceived intrinsic motivational support from their teachers. Model coefficients for all pathways are reported in Figure 3.⁵

Figure 3.

Collective Autonomy Restriction Mediates the Link Between Student Race/Ethnicity and Perceived Teacher Support.



Note. N = 91. Student Race was dummy coded (0 = White, 1 = Student of Color). CAR abbreviation for collective autonomy restriction. IMS abbreviation for Intrinsic Motivation Support from teachers. * $p < .05$, ** $p < .001$

Moderation Analysis: Does Past Exposure to Fair Treatment Buffer the Link Between Collective Autonomy Restriction and Teacher Support?

⁵ Because of the cross-sectional nature of our data, perceived collective autonomy restriction and teacher support were measured at the same time (Fall Semester of the 2020-21 school year), raising questions of the directionality of effects. To address this issue, we ran an additional mediational model where teacher support was treated as the mediator, and collective autonomy restriction was treated as the outcome. The indirect effect of this model was not significant, further supporting our hypothesis which emphasizes collective autonomy restriction as the mediator between student race/ethnicity, and perceived teacher support. Pathway coefficients for this model can be found in the supplemental information.

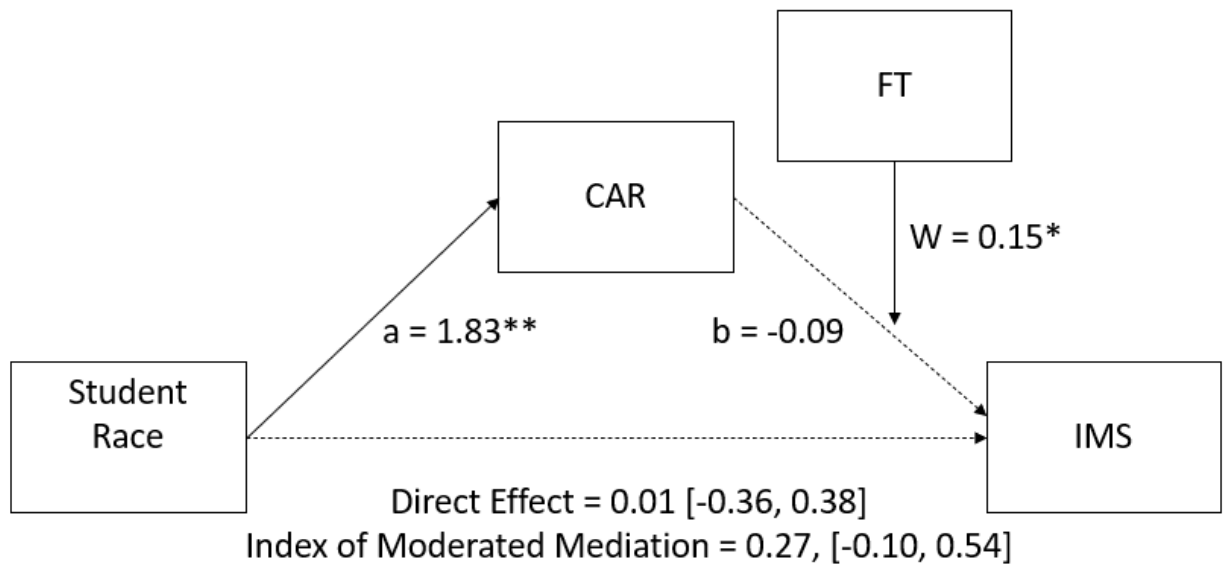
We examined whether previous experiences with fair treatment from teachers and adults at school would attenuate the link between collective autonomy restriction and teacher support (**H3**), in two steps. First, a regression analysis probed for a significant interaction between collective autonomy restriction (CAR) and fair treatment (FT) in predicting student's perceptions of teacher support. Second, moderation of the full mediational model by FT was tested through a moderated mediational model (see Figure 4). Significant moderated mediation was determined through the interpretation of the index of moderated mediation on the difference between the conditional effects (IE) at low (-1SD), average (Mean), and high (+1SD) levels of fair treatment using a bootstrap approach (5,000 iterations) to obtain 95% confidence intervals.

Consistent with our hypothesis, the regression analysis yielded a significant CAR x FT interaction, suggesting that the association between collective autonomy restriction and perceptions of teacher support may depend on student's previous experiences with fair treatment from teachers and adults ($b_{CAR \times FT} = -.15$, $SE = .05$, $p = .004$). We further probed the significant interaction by examining the conditional effects at low, average, and high levels of teacher care. Results from this follow up analysis indicated that greater collective autonomy restriction predicted less perceived teacher support, but only among students who reported experiencing low levels of fair treatment from teachers and adults at school in the past (-1SD: $b_{FT} = -.26$, $SE = .08$, $p = .002$). The association between collective autonomy restriction and teacher support was not significant among students who experienced average (Mean: $b_{FT} = -.10$, $SE = .06$, $p = .095$) or high (+1SD: $b_{FT} = .06$, $SE = .09$, $p = .432$) levels of fair treatment from teachers and adults.

Despite significant moderation of the link between collective autonomy restriction and teacher support by previous experiences with fair treatment, the index of moderated mediation was not significant (index of moderated mediation = .27, $SE = .18$, CI [-.11, .55]). In other words, previous experiences with fair treatment did not moderate the full mediational pathway where student race/ethnicity predicts perceived teacher support through collective autonomy restriction. Model coefficients for all pathways are reported in Figure 4.

Figure 4

Moderated Mediation by Students' Past Experience with Fair Treatment from Teachers and Adults at School.



Note. N = 91. Student Race was dummy coded (0 = White, 1 = Student of Color). CAR abbreviation for collective autonomy restriction. IMS abbreviation for Intrinsic Motivation Support from teachers. Dashed lines indicate non-significant pathways. * $p < .05$, ** $p < .001$.

Discussion

The present study examined whether experiences of collective autonomy restriction differed based on students racial/ethnic background, and the associative link between students' perceptions of collective autonomy restriction and intrinsic motivation

support from teachers. In support of our first hypothesis, racial/ethnic minority students were significantly more likely to feel that their racial/ethnic group's freedom to define and practice their own social identity is restricted in the U.S., compared to their White peers. In support of our second hypothesis, greater feelings of restriction among racial/ethnic minority students, in turn, predicted less perceived support from teachers in the classroom. Consistent with identity-based frameworks of academic motivation, these findings suggest that students' perceptions of their racial/ethnic group's collective autonomy within the broader socio-structural context of the U.S. influences their perceptions of teacher support. However, where past research emphasizes the impact of socio-structural factors on racial/ethnic minority students' perceptions of *themselves* within the academic context, our study suggests that they also shape perceptions of *others* (e.g., teachers) as supportive of their intrinsic motivational needs within academic contexts.

The present study also examined whether fair treatment from teachers and adults at school could help buffer the negative association between collective autonomy restriction and perceived support from teachers. In partial support of hypothesis 3, students' previous experiences with fair treatment were found to moderate the link between collective autonomy restriction and perceptions of teacher support. Specifically, the negative association between collective autonomy restriction and teacher support was only significant among students who reported experiencing low levels of fair treatment at school in the past. Importantly, there was no significant link between collective autonomy restriction and perceived teacher support among students who reported average to high levels of fair treatment from teachers in the past. One interpretation of these results is that

past experiences with teachers and adults who treat students and their peers in a fair and just manner provide students with a positive exemplar of teacher-pupil relationships at school. These positive exemplars, in turn, may “inoculate” student’s future perceptions of teachers from harmful cues that may cause them to anticipate that they will not be supported in academic settings (see the Stereotype Inoculation Model for related arguments about self-perceptions in academia: Dasgupta, 2011).

Limitations and Future Directions

There are several limitations to consider in the present research. First, challenges around the data collection process resulted in the relatively small sample size reported in this study. Mainly, data collection occurred during the COVID-19 pandemic. During this time, our partner school, like most schools across the U.S., had adopted a remote learning model to help reduce the spread of COVID-19 and keep their students and faculty safe. This created barriers for both obtaining parental consent, and collecting student data, as communication between the research team, parents, students, and relevant school faculty was conducted entirely online. The challenges families endured during the pandemic created additional barriers to recruitment.

Because of our small sample size, we made the decision to group Black, Asian, Hispanic, and Multiracial students into a single category (i.e., URM students) to conserve power and test for differences in perceived collective autonomy and teacher support between racial/ethnic minority students and their White peers. We recognize that the racial/ethnic gaps in academic support and performance discussed in our introduction have primarily been documented among Black, Indigenous, and Latinx students. This likely accounts for why we did not observe direct effects of student race/ethnicity on

perceived teacher support in our analyses. However, descriptive statistics suggest that Asian and Multiracial students experience collective autonomy restriction at rates similar to those of Black and Latinx students. There are several reasons as to why Asian and Multiracial students would feel that their racial/ethnic collective autonomy is restricted in the U.S., including increased reports of anti-Asian prejudice during to the COVID-19 pandemic (Nguyen et al., 2020; Ruiz et al., 2021), as well as research indicating that Multiracial individuals experience several forms of racial discrimination from both majority and minority group members (Franco et al., 2021; Shih & Sanchez, 2005). However, due to our limited sample size, we were unable to see whether the strength of the link between collective autonomy restriction and perceived teacher support was similar across individual racial/ethnic minority categories. Future research with a more robust sample size should further examine this question.

Practical Implications for Educators

The present research provides three important implications for educators to consider. First, our findings indicate that adolescents from URM backgrounds are sensitive to socio-structural inequalities that restrict their racial/ethnic group's freedom to practice and define their collective culture and social identity within the U.S. Second, awareness of such restrictions carries over to the classroom and makes URM students attuned to cues that communicate a lack of support from their teachers. Finally, results from our study emphasize the importance of quality relationships between students, their teachers, and other adults at school in buffering the negative impact that collective autonomy restriction can have on feelings of support, especially among students from URM backgrounds. One way that teachers can help foster quality relationships with their

students is by engaging in fair classroom practices (e.g., negotiable approaches towards grading and discipline; see Rivera-Rodriguez, 2021 for details). Future research should further examine specific practices that teachers can adopt to support the intrinsic motivational development of students from URM backgrounds.

Supplemental Information

Measures

Collective Autonomy Restriction

1. In the U.S., people from other groups (e.g., racial/ethnic groups, political group, religious groups, etc.) have tried to control us.
2. In the U.S., people from other groups have tried to control what we can do.”
3. In the U.S., people from other groups have tried to control what customs and practices we should follow.
4. In the U.S., people from other groups have tried to control the extent to which we can act in accordance with our identity.
5. In the U.S., people from other groups have tried to control the extent to which we can follow our customs and practices.
6. In the U.S., people from other groups impose aspects of their culture onto our culture.

Intrinsic Motivation Support

1. I felt that my teachers provided me with choices and options.
2. I felt understood by my teachers.
3. My teachers conveyed confidence in my ability to do well in school.
4. My teachers listened to how I liked to do things.
5. My teachers tried to understand how I saw things before suggesting a new way to do things.
6. My teachers helped me improve at my school work.
7. My teachers made me feel like I was good at my school work.
8. I felt that my teachers wanted me to do well in school.
9. My teachers made me feel like I was able to do my school work.
10. My teachers encouraged my classmates and me to work together.
11. My teachers supported my classmates and me.
12. My teachers had respect for my classmates and me.
13. My teachers were interested in my classmates and me.
14. I felt that my teachers were friendly towards my classmates and me.

Fair Treatment from Teachers and Adults at School

1. In the past, I have been treated fairly by teachers and other adults at school.

2. In the past, when students broke the rules at school, their punishment was decided in a fair way.
3. In the past, teachers and other adults at my school treated me with respect.
4. In the past, students in my racial group were treated fairly by the teachers and other adults at my school.
5. In the past, teachers at school gave me the grades I think I deserved.
6. In the past, my teachers at school had a fair and valid opinion of me.
7. In the past, teachers at my school treated students in my racial group with respect.

Additional Analysis

A principal component analysis using an oblique rotation and a forced 2 factor solution was used to ensure that our measures of Collective Autonomy Restriction and Intrinsic Motivation Support were distinct factors. Results show that the items used to measure Collective Autonomy Restriction and Intrinsic Motivation Support loaded onto separate factors, suggesting that Collective Autonomy Restriction and Intrinsic Motivation Support are distinct factors (factor loadings for all items presented in Table 11). Factor 1 consisted of all 14 items adapted from the learning climate questionnaire (Williams & Deci, 1996) to measure Intrinsic Motivation Support, and explained 53.04% of the total variance. Factor 2 consisted of all 6 items adapted from Kachanoff et al. (2020) to measure collective autonomy restriction, and explained an additional 19.67% of the total variance. Correlations between the two factors were weak at $-.28$.

Table 11.

Factor Loadings for Collective Autonomy Restriction and Intrinsic Motivation

Item	Factor Loadings	
	1	2
<u>Collective Autonomy Restriction (Kachanoff et al., 2020)</u>	-.04	.87
In the U.S., people from other groups (e.g., racial/ethnic groups, political group, religious groups, etc.) have tried to control us.	-.12	.90
In the U.S., people from other groups have tried to control what we can do.	-.09	.90
In the U.S., people from other groups have tried to control what customs and	-.12	.88

practices we should follow.

In the U.S., people from other groups have tried to control the extent to which we can follow our customs and practices.	.08	.93
In the U.S., people from other groups impose aspects of their culture onto our culture.	.12	.74

Intrinsic Motivation Support (Williams & Deci, 1996)

I felt that my teachers provided me with choices and options.	.82	-.09
I felt understood by my teachers.	.84	-.05
My teachers conveyed confidence in my ability to do well in school.	.84	-.05
My teachers listened to how I liked to do things.	.83	.02
My teachers tried to understand how I saw things before suggesting a new way to do things.	.80	.19
My teachers helped me improve at my school work.	.79	.13
My teachers made me feel like I was good at my school work.	.87	-.03
I felt that my teachers wanted me to do well in school.	.80	-.07
My teachers made me feel like I was able to do my school work.	.87	.05
My teachers encouraged my classmates and me to work together.	.76	-.16
My teachers supported my classmates and me.	.78	-.09
My teachers had respect for my classmates and me.	.85	.05
My teachers were interested in my classmates and me.	.90	.00
I felt that my teachers were friendly towards my classmates and me.	.82	-.13

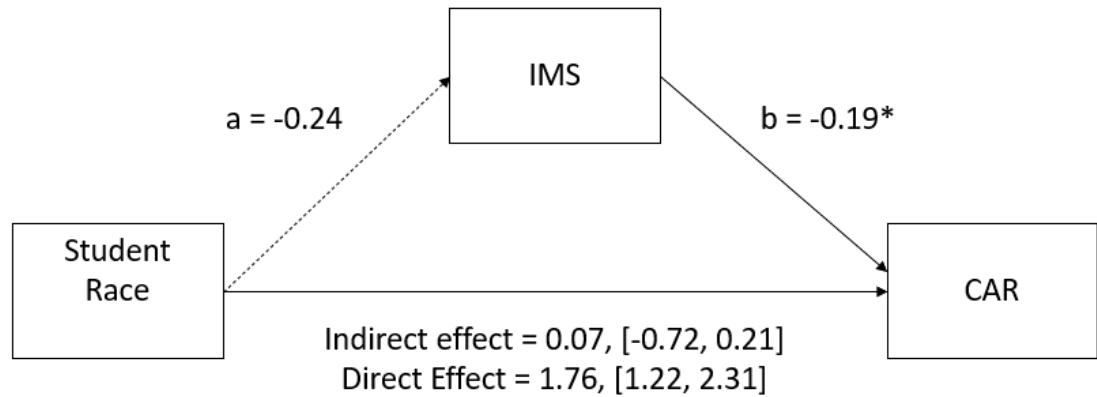
Note. Factor loadings for a principal component analysis using an oblique rotation and a forced 2 factor solution.

Because of the cross-sectional nature of our data, perceived collective autonomy restriction and teacher support were measured at the same time (Fall Semester of the 2020-21 school year), raising questions of the directionality of effects. To address this issue, we ran an additional mediational model where teacher support was treated as the mediator, and collective autonomy restriction was treated as the outcome. The indirect effect of this model was not significant, further supporting our hypothesis which emphasizes collective autonomy restriction as the mediator between student

race/ethnicity, and perceived teacher support (see Figure 4). Pathway coefficients for this model are reported in the model below (Figure 5).

Figure 5.

Supplemental Analysis: Mediation via Teacher Support.



Note. Race coded (0 = White, 1 = Students of Color). CAR = Collective Autonomy Restriction (measured in Fall, 2020). IMS = Intrinsic Motivation Support from Teachers (measured in Fall, 2020) Dashed lines indicate nonsignificant pathways. * $p < .05$, ** $p < .001$.

CHAPTER 5

GENERAL DISCUSSION

Summary of Key Findings

The goals of this dissertation were three-fold. First, Chapter 2 introduced the Movement Mobilization Model of Collective Autonomy (i.e., MMCA), a theoretical model that aimed to extend the “threat and defense” hypothesis of collective autonomy (Kachanoff et al., 2022) by articulating specific social conditions and psychological processes that shape advantaged and disadvantaged group members’ perceptions of collective autonomy. It also integrated social psychological, sociological, and organizational behavioral literatures to identify specific strategies that social movements and counter-movements use to challenge vs. preserve social hierarchy respectively. Second, Chapter 3 built on Chapter 2 by empirically testing a portion of the MMCA model. Within the context of the COVID-19 pandemic, Chapter 3 tested whether perceived instability and threat to the existing U.S. political hierarchy was associated with greater feelings of collective autonomy restriction among politically advantaged group members. It also tested whether greater feelings of collective autonomy restriction lead politically advantaged group members to delegitimize the source of restriction by downplaying the severity of the COVID-19 pandemic and ignoring COVID-19 health and safety guidelines set by the CDC. Finally, Chapter 4 aimed to test the external validity of the collective autonomy restriction literature by testing whether experiencing racial/ethnic collective autonomy shaped adolescents’ perceptions of their teachers as supportive of their intrinsic motivational needs within the classroom context. It also tested whether positive interactions with teachers and adults at school helped buffer the

negative link between students' feeling of collective autonomy restriction and perceptions teacher support.

Theoretical Implications of the MMCA

In Chapter 2, I introduced the MMCA, a theoretical model that builds on the “threat and defense” hypothesis of collective autonomy. Recall that the “threat and defense” hypothesis posits that group members are motivated to defend their collective autonomy from outside restriction. However, the way in which groups defend their collective autonomy depends on their position within the broader social hierarchy. According to the “threat and defense” hypothesis, groups at the bottom of the hierarchy lack power and resources which makes them vulnerable to collective autonomy restriction. Groups at the top of the hierarchy, however, are less likely to experience collective autonomy restriction because of privileged access to power and resources that can be used to protect their collective autonomy from unwanted influence. As such, experiencing collective autonomy restriction may motivate disadvantaged group members to engage in social movements that challenge social hierarchies. Conversely, advantaged group members may feel motivated to engage in counter-movements that seek to resist social change and preserve social hierarchy when their collective autonomy is threatened. What remains unclear, however, are *i*) the psychological processes that influence advantaged and disadvantaged group members perceptions of collective autonomy restriction, and *ii*) the specific strategies that advantaged and disadvantaged group members use to effectively preserve vs. challenge social hierarchy.

The MMCA addresses these gaps by integrating the “threat and defense” hypothesis with social identity, system justification, and intergroup threat literatures to

articulate specific psychological processes that predict whether and when advantaged and disadvantaged group members feel that their collective autonomy is restricted. When social hierarchy is stable, the MMCA hypothesizes that disadvantaged group members' perceptions of collective autonomy restriction depend on their system beliefs. Specifically, those who view social hierarchy as permeable are less likely to experience collective autonomy restriction, while those who view social hierarchy as impermeable are more likely to experience collective autonomy restriction. Conversely, when social hierarchy is unstable, the MMCA hypothesizes that experiencing privileged-identity and intergroup threat can increase feelings of collective autonomy restriction among advantaged group members.

By integrating the “threat and defense” hypothesis of collective autonomy with these psychological theories, future research can better explain why some disadvantaged group members choose not to engage in collective action that would otherwise benefit their group, even in the face of objective collective autonomy restriction. It also explains why some advantaged group members feel that their collective autonomy is restricted, despite their privileged position within the hierarchy. Understanding the psychological processes that shape perceptions of collective autonomy restriction also carries practical implications for social movement organizations (SMOs) that aim to dismantle social hierarchy in favor of a more equitable society. For example, by increasing social change beliefs among disadvantaged group members, and educating advantaged group members about their privilege in non-threatening ways, SMOs can increase public engagement and support among both groups.

The MMCA also integrates sociological and organizational behavioral literatures to highlight three specific strategies that social movements use to challenge social hierarchy. These include achieving legitimacy, mobilizing resources, and gaining centrality. In brief, legitimacy involves convincing the public that the goals of a social movement are aligned with the values and principles of broader society. Mobilizing resources involves pooling together and mobilizing both tangible and intangible resources that can be leveraged towards achieving the social movement's goals. Finally, gaining centrality involves establishing social connections at both the grassroots level (e.g., by creating a network of active constituents) and the institutional level (e.g., by creating connections with politicians, lawyers, and other professional that exercise influence within institutions of power) to help advance the social movement's agenda and achieve their goals.

Counter-movements, on the other hand, aim to de-legitimize social movements that challenge social hierarchy. Paralleling the strategies used by social movements, counter-movements seek to delegitimize social movements through the mobilization of their own resources and the leveraging of their own societal and institutional networks. However, because counter-movements are often created by, or share common goals with political and institutional elites who seek to preserve social hierarchy, they hold advantages in both the types of resource and the social networks they have at their disposal. For example, counter-movements in the past have leveraged institutional resources such as the police, military, judicial systems, and government officials to de-legitimize social movements in the eyes of the public (Combs, 2016; Meyer & Saggenborg, 1996; Mottl, 1980). Furthermore, because counter-movements are often

backed by institutions of power, active constituents may also feel justified in engaging in acts of violence or domestic terrorism to restrict the mobilization of social movements without fear of social or legal repercussion (Paulus & Kenworthy, 2022; Donovan, et al, 2023).

To date, the collective autonomy literature has yet to consider how social movements and counter-movements effectively challenge vs. protect social hierarchy. By identifying specific organizational factors that facilitate the mobilization of social movements and counter-movements, future research can better examine how these forms of collective action influence one another and shape perceptions of collective autonomy. For example, social psychologists can directly examine whether advantaged group members' perceptions of collective autonomy restriction are predicted by the extent to which they perceive social movements to be gaining legitimacy in the public eye. Similarly, sociologists might use social network analysis to track the mobilization of social movements at the local/regional level and see whether they predict regional differences in counter-movement mobilization. In doing so, social scientists can gain a better understanding of how social movements and counter-movements unfold in real time.

Finally, while the MMCA examines how social identity, hierarchy stability, and threat shape perceptions of collective autonomy restriction in the context of collective action, this theoretical framework can also shed light on how collective autonomy influences intergroup processes in other contexts as well. In Chapter 3, I extended and empirically tested portions of the MMCA in the political context to see whether

instability within political hierarchies induced perceptions of collective autonomy restriction among politically advantaged group members.

Hierarchy Instability and Perceptions of Collective Autonomy Restriction Among Advantaged Group Members: An Empirical Investigation

Chapter 3 empirically tested whether political hierarchy instability was associated with greater perceptions of collective autonomy restriction among Republicans (compared to Democrats) during the COVID-19 pandemic. When data was collected at the start of the COVID-19 pandemic, the Republican party held executive office and had a senate majority, placing them in an objectively advantaged position within the political hierarchy, compared to Democrats. At the same time, continuous criticism of the Republican party's handling of the pandemic by the Democratic party and left-leaning media leading up to the 2020 presidential election cycle was perceived by many republicans as a threat to their advantaged position within the political hierarchy (Drezner, 2020; Halon, 2020; Stieb, 2020). These conditions provided us with the opportunity to empirically test the MMCA's hypotheses regarding hierarchy threat, advantaged group members' perceptions of collective autonomy restriction, and resistance to the perceived source of hierarchy instability within a political context.

Consistent with the MMCA, findings from this study found that politically advantaged Republicans experienced greater collective autonomy restriction than Democrats, despite their advantaged position within the political hierarchy. Furthermore, greater perceptions of collective autonomy restriction predicted less perceptions that COVID-19 posed a significant threat to the American public, and less adherence to the CDC's COVID-19 health and safety guidelines. Interpreting these findings within the

MMCA's theoretical framework, I argue that Republicans underplayed the severity of the COVID-19 pandemic to de-legitimize the source of hierarchy threat and protect their collective autonomy. The de-legitimization of COVID-19 was further supported by the Trump administration and right-leaning media networks that purposefully spread misinformation regarding the severity of the virus' symptoms and the speed at which a vaccine could be developed (Jurkowitz & Mitchel, 2020; Funk et al., 2020). This parallels the strategies that counter-movements use to delegitimize social movements, including the leveraging of political elites and social news networks to disseminate misinformation that directly conflicts with scientific and medical experts attempting to educate and warn the public of the severity of the pandemic.

Findings also show that collective autonomy restriction predicted less adherence to the CDC's health and safety guidelines overtime. This seems to suggest that experiencing collective autonomy restriction motivates behaviors that aim to resist sources of hierarchy threat. While not a direct form of collective action, behavioral resistance among Republicans may have been linked to nationwide demonstrations that protested local governments' COVID-19 lockdown protocols, and the Biden Administration's vaccine mandate (BBC News, 2021; Wise, 2021). These protests – which were overwhelmingly organized and supported by conservative activist groups, political donors, and political elites (including President Donald Trump) – rallied around the notion that state sanctioned lockdowns, and later that the Biden Administrations COVID-19 vaccine mandate, infringed on the civil liberties and freedoms of the American public (Wise, 2021). In other words, Republican's and political conservatives

mobilized to protest the COVID-19 lockdown to preserve their advantaged position within the political hierarchy and to protect their collective autonomy.

Racial/Ethnic Collective Autonomy Restriction at School: Replicating Theory in Applied Educational Contexts

Chapters 2 and 3 of my dissertation examined the implications of collective autonomy at the macro level. Specifically, they theorized and empirically showed how hierarchy (in)stability shapes group members' perceptions of collective autonomy and influences collective action that challenge vs. protect the status quo. However, extant theories suggest that experiencing collective autonomy restriction also carries significant implications at the individual level. For example, cross-sectional laboratory research indicates that experiencing collective autonomy can negatively impact the psychological well-being of marginalized group members (Kachanoff et al., 2019). Furthermore, laboratory studies using minimal-group paradigms suggest that experiencing collective autonomy restriction can negatively impact interpersonal interactions (Kachanoff et al., 2020). An important question, then, is whether the findings from these cross-sectional surveys and laboratory analogues replicate in real-world contexts.

In Chapter 4, I examined whether these findings can be applied to educational contexts and empirically tested whether experiencing collective autonomy restriction influences racial/ethnic minority students' experiences in the classroom. Consistent with past research, findings showed that adolescents from underrepresented racial/ethnic backgrounds were more likely to experience collective autonomy restriction compared to their White peers. In turn, experiencing greater collective autonomy restriction led students from underrepresented backgrounds to feel unsupported by their teachers. These

findings advance both the collective autonomy and the intrinsic motivational learning literature in several ways.

First, these findings are the first to implicate collective autonomy as an important psychological variable that can influence students' academic experiences. It is well documented that experiencing personal autonomy at the individual level is critical for the development of intrinsic academic motivation among students of all ages. However, research on intrinsic motivation has yet to consider how students' collective experiences tied to their social identity further influences their intrinsic motivation. This gap in the intrinsic motivational learning literature is surprising given that social identity becomes increasingly important as children grow into adolescence and transition into young adulthood. As such, these findings are an important first step towards bettering our understanding of how social identity and collective experiences shape students' academic development.

These findings also show how racial/ethnic inequality at the societal level can bleed into the classroom and exacerbate racial/ethnic gaps in educational outcomes. While this study focused on the racial/ethnic gaps in perceived teacher support, it is well documented that teacher support also influences several other academic outcomes (Ryan & Deci, 2013; Kusrkar *et al.*, 2013; Reeve *et al.*, 2004). Thus, future research should examine whether collective autonomy restriction is associated with other racial/ethnic based gaps in education – such as the race discipline gap (Okonofua *et al.*, 2016).

As researchers continue to explore these links, they should also explore whether pervasive racial/ethnic gaps in educational outcomes effects students' perceptions of collective autonomy restriction. For example, continuously seeing one's racial/ethnic

peers being unjustly treated at school likely increases feelings of collective autonomy restriction. This may cause a negative feedback loop, where students' experiences of collective autonomy restriction increase sensitivity to racial/ethnic inequality at school, which in turn confirms and exacerbates perceptions of racial/ethnic autonomy restriction.

Our study also showed that experiencing fair and just treatment from teachers in the past can help protect racial/ethnic minority students from the negative impact collective autonomy restriction can have on perceptions of teacher support. From a theoretical perspective, these findings suggest that positive experiences with teachers and other adults at school can help “inoculate” student’s perceptions of teacher support from harmful societal cues that may cause them to anticipate that they will not be supported in academic settings (see the Stereotype Inoculation Model for related arguments about self-perceptions in academia: Dasgupta, 2011). From an applied perspective, these findings emphasize the need for education practitioners to consciously consider the ways in which social inequality impacts the academic experience of racial/ethnic minority students, and actively foster quality relationships with these students by engaging in fair classroom practices to better support them. Future research can help support these efforts by engaging in participatory research with students and teachers to identify specific pedagogies that resonate with students from marginalized background and help support the development of intrinsic motivational learning.

Conclusions and Practical Implications

Across three manuscripts, my dissertation has theorized and tested hypotheses about how social identity, hierarchy stability, social inequity, and threat influence advantaged and disadvantaged group members' perceptions of collective autonomy. Each manuscript has

examined implications of collective autonomy restriction on seemingly separate social phenomena - collective action, political polarization, and education inequity. Certainly, research on these topics has, for the most part, been siloed within the fields of social, political, and educational psychology, respectively. However, I argue that these social phenomena are interrelated, and that future research should take an interdisciplinary approach towards examining them.

Like most issues in the U.S., education has become increasingly political. Educational inequity - whether based on race, gender, socioeconomic status, religion, etc. - is well-documented as a pervasive and growing problem in American society (Barshay, 2020). While the findings presented here offer only a small glimpse at a much larger problem, they do provide evidence which further supports decades of research calling for educators to implement policies and practices that directly acknowledge identity-based strengths and barriers to better support students from marginalized backgrounds (see Silverman et al., 2023 for a review). These evidence-based policies and practices have been shown to positively impact psychological, behavioral, and academic outcomes of all students, but especially those from underrepresented and marginalized backgrounds. Despite these benefits, Republican politicians, conservative lawmakers, and their constituents actively leverage political and institutional power to impede progress.

Consider, for example, recent controversies over the implementation of culturally responsive pedagogies and inclusive gender and sex education in K-12 schools. It is well documented that engaging students in conversations that critically analyze the ways in which systems of power advantage and disadvantage different groups in society has many benefits. These discussions, which validate and support students' unique social identities,

can help students from marginalized backgrounds navigate systemic barriers both inside and outside of the classroom. They can also help buffer the negative impact that systemic inequality can have on the psychological wellbeing of marginalized students. Furthermore, these discussions help the development of critical consciousness (Thomas et al., 2014;) among students from *all* backgrounds so they can engage society as informed and responsible citizens.

Despite these pro-social benefits, conservative-led counter-movements actively advocate to ban discussions of race, gender, and sexual orientation in schools (Greenberg & Sherman, 2021; Gross, 2021; Najarro, 2022; Somaskanda, 2022). Mobilization of these counter-movements is motivated on two premises. The first is that discussion of systemic and identity-based inequality threatens the self-image of children from advantaged or privileged backgrounds. The second is that the decision to educate children in conversations related to systemic inequality and social identity should lie with parents, and not the public education system. By framing culturally responsive and inclusive pedagogies as threats to the advantaged group's self-image and collective autonomy, these counter-movements delegitimize efforts to address social inequity within education.

In the last two years, 42 states have introduced bills that aim to restrict discussions of racism, sexism, gender identity, sexual orientation, and diversity in the classroom (Najarro, 2022). In states where these bills have passed into law, some teachers have felt dissuaded from engaging students in conversations that critically analyze the ways in which systems of power advantage and disadvantage different groups in society. Despite this adversity, many more teachers, students, and their families continue to fight for their right to recognize, validate, and support individuals from

marginalized social backgrounds as they navigate educational systems. As social scientists, we can further support their efforts by engaging in collaborative participatory research to translate theory into actionable solutions that help effect social change.

BIBLIOGRAPHY

- Agnew, R., Brezina, T., Wright, J. P., & Cullen, F. T. (2002). Strain, Personality Traits, and Delinquency: Extending General Strain Theory. *Criminology*, 40(1), 43–72. <https://doi.org/10.1111/j.1745-9125.2002.tb00949.x>
- Allen, K. A., Slaten, C. D., Arslan, G., Roffey, S., Craig, H., & Vella-Brodrick, D. A. (2021). School belonging: The importance of student and teacher relationships. In *The Palgrave handbook of positive education* (pp. 525-550). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-64537-3_21
- Alvarez, S. (1989). Women's movements and gender politics in the Brazilian transition The women's movement in Latin America: Feminism and the transition to democracy, edited by Jane Jaquette. *Winchester, MA: Unwin Hyman*.
- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin*, 141(3), 574–601. <https://doi.org/10.1037/a0038781>
- Andrews, K. T., Beyerlein, K., & Tucker Farnum, T. (2016). The Legitimacy of Protest: Explaining White Southerners' Attitudes Toward the Civil Rights Movement. *Social Forces*, 94(3), 1021–1044. <https://doi.org/10.1093/sf/sov097>
- Aveni, A. F. (1978). Organizational Linkages and Resource Mobilization: The Significance of Linkage Strength and Breadth. *The Sociological Quarterly*, 19(2), 185–202.
- Ash, E., Galletta, S., Hangartner, D., Margalit, Y., & Pinna, M. (2020). The effect of Fox News on health behavior during COVID-19. Available at SSRN 3636762. <https://doi.org/10.3929/ETHZ-B-000427768>
- Ashburn-Nardo, L. (2018). What can allies do? In *The Oxford handbook of workplace discrimination* (pp. 373–386). Oxford University Press.
- Bacharach, S. B., & Lawler, E. J. (1980). *Power and politics in organizations*. Jossey-Bass Incorporated Pub.
- Baldassarri, D., & Park, B. (2020). Was there a culture war? Partisan polarization and secular trends in US public opinion. *The Journal of Politics*, 82(3), 809-827. <https://doi.org/10.1086/707306>
- Barkan, S. E. (1984). Legal Control of the Southern Civil Rights Movement. *American Sociological Review*, 49(4), 552–565. <https://doi.org/10.2307/2095468>
- Baron, J., & Jost, J. T. (2019). False equivalence: Are liberals and conservatives in the United States equally biased?. *Perspectives on Psychological Science*, 14(2), 292-303. <https://doi.org/10.1177/1745691618788876>

- Barshay, J., & Barshay, J. (2020). A decade of research on the rich-poor divide in education. *The Hechinger Report*. <https://hechingerreport.org/a-decade-of-research-on-the-rich-poor-divide-in-education/>
- BBC News. (2020, April 21). Coronavirus lockdown protest: What's behind the US demonstrations? *BBC News*. <https://www.bbc.com/news/world-us-canada-52359100>
- Benner, A. D., & Graham, S. (2013). The antecedents and consequences of racial/ethnic discrimination during adolescence: Does the source of discrimination matter? *Developmental Psychology*, 49(8), 1602–1613. <https://doi.org/10.1037/a0030557>
- Blanz, M., Mummendey, A., Mielke, R., & Klink, A. (1998). Responding to negative social identity: A taxonomy of identity management strategies. *European Journal of Social Psychology*, 28(5), 697–729. [https://doi.org/10.1002/\(SICI\)1099-0992\(199809/10\)28:5<697::AID-EJSP889>3.0.CO;2-#](https://doi.org/10.1002/(SICI)1099-0992(199809/10)28:5<697::AID-EJSP889>3.0.CO;2-#)
- Boje, D. M., & Whetten, D. A. (1981). Effects of organizational strategies and contextual constraints on centrality and attributions of influence in interorganizational networks. *Administrative Science Quarterly*, 378-395. <https://doi.org/10.2307/2392513>
- Bolton, C. D. (1972). Alienation and Action: A Study of Peace-Group Members. *American Journal of Sociology*, 78(3), 537–561.
- Boorstein, M., & Pulliam Bailey, S. (2017). Hate saying “Merry Christmas” now? Everyone has Trump on the brain. *The Washington Post*. <https://www.washingtonpost.com/news/acts-of-faith/wp/2017/12/22/hate-saying-merry-christmas-now-everyone-has-trump-on-the-brain/>
- Bottiani, J. H., Bradshaw, C. P., & Mendelson, T. (2016). Inequality in Black and White high school students' perceptions of school support: An examination of race in context. *Journal of youth and adolescence*, 45, 1176-1191. <https://doi.org/10.1007/s10964-015-0411-0>
- Bouquet, C. (2005). A new perspective on global mindsets. In *Building global mindsets* (pp. 1-13). Palgrave Macmillan, London. https://doi.org/10.1057/9780230522558_1
- Bouquet, C., & Birkinshaw, J. (2008). Managing Power in the Multinational Corporation: How Low-Power Actors Gain Influence. *Journal of Management*, 34(3), 477–508. <https://doi.org/10.1177/0149206308316062>
- Branscombe, N. R. (1998). Thinking about one's gender group's privileges or disadvantages: Consequences for well-being in women and men. *British Journal of Social Psychology*, 37(2), 167–184. <https://doi.org/10.1111/j.2044-8309.1998.tb01163.x>

- Branscombe, N. R., Schmitt, M. T., & Schiffhauer, K. (2007). Racial attitudes in response to thoughts of white privilege. *European Journal of Social Psychology*, 37(2), 203–215. <https://doi.org/10.1002/ejsp.348>
- Brass, D. J. (1984). Being in the Right Place: A Structural Analysis of Individual Influence in an Organization. *Administrative Science Quarterly*, 29(4), 518. <https://doi.org/10.2307/2392937>
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological bulletin*, 86(2), 307. <https://doi.org/10.1037/0033-2909.86.2.307>
- Butz, D. A., & Yogeeswaran, K. (2011). A new threat in the air: Macroeconomic threat increases prejudice against Asian Americans. *Journal of Experimental Social Psychology*, 47(1), 22–27. <https://doi.org/10.1016/j.jesp.2010.07.014>
- Byrd, C. M., & Chavous, T. (2011). Racial identity, school racial climate, and school intrinsic motivation among African American youth: The importance of person–context congruence. *Journal of Research on Adolescence*, 21(4), 849–860.
- Cable, S., & Benson, M. (1993). Acting Locally: Environmental Injustice and the Emergence of Grass-roots Environmental Organizations. *Social Problems*, 40, 464.
- Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *The Journal of Higher Education*, 70(2), 134–160. <https://doi.org/10.1080/00221546.1999.11780759>
- Calvillo, D. P., Ross, B. J., Garcia, R. J. B., Smelter, T. J., & Rutchick, A. M. (2020). Political Ideology Predicts Perceptions of the Threat of COVID-19 (and Susceptibility to Fake News About It). *Social Psychological and Personality Science*, 11(8), 1119–1128. <https://doi.org/10.1177/1948550620940539>
- Comas-Díaz, L., & Greene, B. (Eds.). (1994). *Women of color: Integrating ethnic and gender identities in psychotherapy* (pp. xxiii, 518). The Guilford Press.
- Campbell, W. K., & Sedikides, C. (1999). Self-Threat Magnifies the Self-Serving Bias: A Meta-Analytic Integration. *Review of General Psychology*, 3(1), 23–43. <https://doi.org/10.1037/1089-2680.3.1.23>
- Carmines, E. G., Ensley, M. J., & Wagner, M. W. (2012, October). Political ideology in American politics: one, two, or none?. *The Forum* (Vol. 10, No. 3). De Gruyter. <https://doi.org/10.1515/1540-8884.1526>
- Center, P.R. (2014). Political Polarization in the American Public. <https://www.pewresearch.org/politics/2014/06/12/political-polarization-in-the-american-public/>

- Chirkov, V. I. (2009). A cross-cultural analysis of autonomy in education: A self-determination theory perspective. *Theory and Research in Education*, 7(2), 253-262. <https://doi.org/10.1177/14778785091043>
- Chirumbolo, A., Areni, A., & Sensales, G. (2004). Need for cognitive closure and politics: Voting, political attitudes and attributional style. *International Journal of Psychology*, 39(4), 245–253. <https://doi.org/10.1080/00207590444000005>
- Clayson, D. E., & Haley, D. A. (1990). Student evaluations in marketing: What is actually being measured?. *Journal of Marketing Education*, 12(3), 9-17. <https://doi.org/10.1177/027347539001200302>
- Clements, J. M. (2020). Knowledge and behaviors toward COVID-19 among US residents during the early days of the pandemic: cross-sectional online questionnaire. *JMIR public health and surveillance*, 6(2), e19161. <https://publichealth.jmir.org/2020/2/e19161/>
- Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of personality and social psychology*, 85(5), 808. <https://doi.org/10.1037/0022-3514.85.5.808>
- Coleman, J. S. (1974). Youth: Transition to adulthood. *NASSP Bulletin*, 58(385), 4-11. <https://doi.org/10.1177/0192636574058385>
- Collingwood, L., Lajevardi, N., & Oskooii, K. A. (2018). A change of heart? Why individual-level public opinion shifted against Trump’s “Muslim Ban”. *Political Behavior*, 40, 1035-1072. <https://doi.org/10.1007/s11109-017-9439-z>
- Combs, B. H. (2016). Black (and Brown) Bodies Out of Place: Towards a Theoretical Understanding of Systematic Voter Suppression in the United States. *Critical Sociology*, 42(4–5), 535–549. <https://doi.org/10.1177/0896920514563089>
- Cook, T. D., Crosby, F., & Hennigan, K. M. (1977). The construct validity of relative deprivation. In R. L. Miller & J. M. Suls (Eds.), *Comparison Processes: Theoretical and Empirical Perspectives* (pp. 307–333).
- Craig, M. A., & Richeson, J. A. (2014). On the Precipice of a “Majority-Minority” America: Perceived Status Threat From the Racial Demographic Shift Affects White Americans’ Political Ideology. *Psychological Science*, 25(6), 1189–1197. <https://doi.org/10.1177/0956797614527113>
- Crandall, C. S., Miller, J. M., & White, M. H. (2018). Changing Norms Following the 2016 U.S. Presidential Election: The Trump Effect on Prejudice. *Social Psychological and Personality Science*, 9(2), 186–192. <https://doi.org/10.1177/1948550617750735>
- Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological Review*, 83(2), 85–113. <https://doi.org/10.1037/0033-295X.83.2.85>

- Darnovsky, M., Epstein, B. and Flacks, R. 1995. "Introduction". In *Cultural Politics and Social Movements*, Edited by: Darnovsky, M., Epstein, B. and Flacks, R. vii–xxiii. Philadelphia: Temple University Press.
- Dasgupta, N. (2011). Ingroup experts and peers as social vaccines who inoculate the self-concept: The stereotype inoculation model. *Psychological Inquiry*, 22(4), 231–246. <https://doi.org/10.1080/1047840X.2011.607313>
- Davidai, S., & Ongis, M. (2019). The politics of zero-sum thinking: The relationship between political ideology and the belief that life is a zero-sum game. *Science Advances*, 5(12), eaay3761. <https://doi.org/10.1126/sciadv.aay3761>
- Davis, J. (2001). American Indian boarding school experiences: Recent studies from Native perspectives. *OAH Magazine of History*, 15(2), 20–22. <https://doi.org/10.1093/maghis/15.2.20>
- De Zavala, A. G., Cislak, A., & Wesolowska, E. (2010). Political Conservatism, Need for Cognitive Closure, and Intergroup Hostility. *Political Psychology*, 31(4), 521–541. <https://doi.org/10.1111/j.1467-9221.2010.00767.x>
- Deaux, K. (1996). Social identification. In *Social psychology: Handbook of basic principles* (pp. 777–798). The Guilford Press.
- Deci, Edward L., Robert J. Vallerand, Luc G. Pelletier, and Richard M. Ryan. "Motivation and education: The self-determination perspective." *Educational psychologist* 26, no. 3-4 (1991): 325–346. <https://doi.org/10.1080/00461520.1991.9653137>
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Ditto, P. H., Liu, B. S., Clark, C. J., Wojcik, S. P., Chen, E. E., Grady, R. H., ... & Zinger, J. F. (2019). At least bias is bipartisan: A meta-analytic comparison of partisan bias in liberals and conservatives. *Perspectives on Psychological Science*, 14(2), 273–291. DOI: [10.1177/1745691617746796](https://doi.org/10.1177/1745691617746796)
- Dobbs, R., & Nicholson, S. (2022). Inverting the Lens: White Privilege Denial in Evaluations of Politicians and Policy. *Perspectives on Politics*, 1–19. <https://doi.org/10.1017/S1537592721004102>
- Donovan, J., Fagan, K., & Lee, F. (2023) CALLING US TO FIGHT” Harvard Kennedy School (Working Paper). https://mediamanipulation.org/sites/default/files/media-files/j6_motivations_working_paper.pdf

- Dovidio, J. F., Mann, J., & Gaertner, S. L. (1989). Resistance to affirmative action: The implications of aversive racism. In *Affirmative action in perspective* (pp. 83-102). Springer, New York, NY. DOI: 10.1007/978-1-4613-9639-0_7
- Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *The Pacific Sociological Review*, 18(1), 122–136. <https://doi.org/10.2307/1388226>
- Drezner, D. W. (2020). The unique incompetence of Donald Trump in a crisis. *The Washington Post*. <https://www.washingtonpost.com/outlook/2020/03/09/unique-incompetence-donald-trump-crisis/>
- Druckman, J. N. (2017). The crisis of politicization within and beyond science. *Nature Human Behaviour*, 1(9), 615-617. <https://doi.org/10.1038/s41562-017-0183-5>
- Druckman, J. N., & Bolsen, T. (2011). Framing, motivated reasoning, and opinions about emergent technologies. *Journal of Communication*, 61(4), 659-688. <https://doi.org/10.1111/j.1460-2466.2011.01562.x>
- Druckman, J. N., & McGrath, M. C. (2019). The evidence for motivated reasoning in climate change preference formation. *Nature Climate Change*, 9(2), 111-119. <https://doi.org/10.1038/s41558-018-0360-1>
- Dunlap, R. E., McCright, A. M., & Yarosh, J. H. (2016). The political divide on climate change: Partisan polarization widens in the US. *Environment: Science and Policy for Sustainable Development*, 58(5), 4-23.
- Drury, J., & Reicher, S. (2005). Explaining enduring empowerment: A comparative study of collective action and psychological outcomes. *European Journal of Social Psychology*, 35(1), 35–58. <https://doi.org/10.1002/ejsp.231>
- Dubin, R. (1957). Power and Union-Management Relations. *Administrative Science Quarterly*, 2(1), 60–81. <https://doi.org/10.2307/2390589>
- Dunwoody, P. T., & Plane, D. L. (2019). The influence of authoritarianism and outgroup threat on political affiliations and support for antiDemocratic policies. *Peace and Conflict: Journal of Peace Psychology*, 25(3), 198–210. <https://doi.org/10.1037/pac0000397>
- Ellemers, N. (1993). The Influence of Socio-structural Variables on Identity Management Strategies. *European Review of Social Psychology*, 4(1), 27–57. <https://doi.org/10.1080/14792779343000013>
- Ellemers, N., & Barreto, M. (2009). Collective action in modern times: How modern expressions of prejudice prevent collective action. *Journal of Social Issues*, 65(4), 749-768. <https://doi.org/10.1111/j.1540-4560.2009.01621.x>

- Ellemers, N., & Bos, A. E. R. (1998). Social Identity, Relative Deprivation, and Coping With the Threat of Position Loss: A Field Study Among Native Shopkeepers in Amsterdam1. *Journal of Applied Social Psychology*, 28(21), 1987–2006. <https://doi.org/10.1111/j.1559-1816.1998.tb01357.x>
- Ellemers, N., van Knippenberg, A., & Wilke, H. (1990). The influence of permeability of group boundaries and stability of group status on strategies of individual mobility and social change. *British Journal of Social Psychology*, 29(3), 233–246. <https://doi.org/10.1111/j.2044-8309.1990.tb00902.x>
- Ellemers, N., Wilke, H., & van Knippenberg, A. (1993). Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. *Journal of Personality and Social Psychology*, 64, 766–778. <https://doi.org/10.1037/0022-3514.64.5.766>
- Enders, A. M. (2021). Issues versus Affect: How Do Elite and Mass Polarization Compare? *The Journal of Politics*, 83(4), 1872–1877. <https://doi.org/10.1086/715059>
- Feldman, K. A. (1989). The association between student ratings of specific instructional dimensions and student achievement: Refining and extending the synthesis of data from multisection validity studies. *Research in Higher Education*, 583-645. <https://www.jstor.org/stable/40195923>
- Feldman, S. (2003). Values, ideology, and the structure of political attitudes. In *Oxford handbook of political psychology* (pp. 477–508). Oxford University Press.
- Fellner, J. (2009). Race, drugs, and law enforcement in the United States. *Stan. L. & Pol'y Rev.*, 20, 257.
- Fetner, T. (2001). Working Anita Bryant: The Impact of Christian Anti-Gay Activism on Lesbian and Gay Movement Claims. *Social Problems*, 48(3), 411–428. <https://doi.org/10.1525/sp.2001.48.3.411>
- Fetner, T. (2008). *How the Religious Right Shaped Lesbian and Gay Activism*. U of Minnesota Press.
- Franco, M., Durkee, M., & McElroy-Heltzel, S. (2021). Discrimination comes in layers: Dimensions of discrimination and mental health for multiracial people. *Cultural Diversity and Ethnic Minority Psychology*, 27(3), 343. <https://doi.org/10.1037/cdp0000441>
- Frankenberg, R. (1993). *White women, race matters: The social construction of whiteness*. Routledge. <https://doi.org/10.4324/9780203973431>
- Freeman, J. (1986). The Political Culture of the Democratic and Republican Parties. *Political Science Quarterly*, 101(3), 327–356. <https://doi.org/10.2307/2151619>

- Frenda, S. J., Knowles, E. D., Saletan, W., & Loftus, E. F. (2013). False memories of fabricated political events. *Journal of Experimental Social Psychology*, 49(2), 280-286. <https://doi.org/10.1016/j.jesp.2012.10.013>
- Funk, C., Kennedy, B., & Johnson, C. (2020, May 21). Trust in Medical Scientists Has Grown in U.S., but Mainly Among Democrats. *Pew Research Center Science & Society*. <https://www.pewresearch.org/science/2020/05/21/trust-in-medical-scientists-has-grown-in-u-s-but-mainly-among-Democrats/>
- Gadarian, S. K., Goodman, S. W., & Pepinsky, T. B. (2021). Partisanship, health behavior, and policy attitudes in the early stages of the COVID-19 pandemic. *PLOS ONE*, 16(4), e0249596. <https://doi.org/10.1371/journal.pone.0249596>
- Gaines, N. S., & Garand, J. C. (2010). Morality, Equality, or Locality: Analyzing the Determinants of Support for Same-sex Marriage. *Political Research Quarterly*, 63(3), 553–567.
- Gawronski, B. (2012). Back to the future of dissonance theory: Cognitive consistency as a core motive. *Social cognition*, 30(6), 652-668. <https://doi.org/10.1521/soco.2012.30.6.652>
- Geana, M. V., Rabb, N., & Sloman, S. (2021). Walking the party line: The growing role of political ideology in shaping health behavior in the United States. *SSM - Population Health*, 16, 100950. <https://doi.org/10.1016/j.ssmph.2021.100950>
- Gee, G. C., & Ford, C. L. (2011). STRUCTURAL RACISM AND HEALTH INEQUITIES: Old Issues, New Directions. *Du Bois Review: Social Science Research on Race*, 8(1), 115–132. <https://doi.org/10.1017/S1742058X11000130>
- Gee, G. C., & Hicken, M. T. (2021). Structural Racism: The Rules and Relations of Inequity. *Ethnicity & Disease*, 31(Suppl), 293–300. <https://doi.org/10.18865/ed.31.S1.293>
- Gee, G. C., & Ro, A. (2009). Racism and discrimination. *Asian American communities and health: Context, research, policy, and action*, 364-402.
- Germani, G. (1978). *Authoritarianism, fascism, and national populism*. Transaction Publishers.
- Ghoshal, S., & Bartlett, C. A. (1990). The Multinational Corporation as an Interorganizational Network. *The Academy of Management Review*, 15(4), 603–625. <https://doi.org/10.2307/258684>
- Ghoshal, S., & Nohria, N. (1989). Internal Differentiation Within Multinational Corporations. *Strategic Management Journal*, 10(4), 323–337.

- Ginsberg, M. B., & Wlodkowski, R. J. (2019). Intrinsic motivation as the foundation for culturally responsive social-emotional and academic learning in teacher education. *Teacher Education Quarterly*, 46(4), 53-66.
<https://www.jstor.org/stable/26841576>
- Glock, S., & Kovacs, C. (2013). Educational psychology: Using insights from implicit attitude measures. *Educational Psychology Review*, 25, 503-522.
<https://doi.org/10.1007/s10648-013-9241-3>
- Gordon, L., & Hunter, A. (1979). *Sex, Family & the New Right: Anti-feminism as a Political Force*. New England Free Press.
- Gregory, A., & Ripski, M. B. (2008). Adolescent trust in teachers: Implications for behavior in the high school classroom. *School psychology review*, 37(3), 337-353.
<https://doi.org/10.1080/02796015.2008.12087881>
- Greenberg, J., & Sherman, A. (2021). What is critical race theory, and why are conservatives blocking it? *Poynter*. <https://www.poynter.org/fact-checking/2021/what-is-critical-race-theory-and-why-are-conservatives-blocking-it/>
- Gross, T. (2021, June 24). Uncovering Who Is Driving The Fight Against Critical Race Theory In Schools. *NPR*.
<https://www.npr.org/2021/06/24/1009839021/uncovering-who-is-driving-the-fight-against-critical-race-theory-in-schools>
- Grossmann, M., & Hopkins, D. A. (2015). Ideological Republicans and Group Interest Democrats: The Asymmetry of American Party Politics. *Perspectives on Politics*, 13(1), 119–139. <https://doi.org/10.1017/S1537592714003168>
- Halevy, N., Y. Chou, E., & D. Galinsky, A. (2011). A functional model of hierarchy: Why, how, and when vertical differentiation enhances group performance. *Organizational Psychology Review*, 1(1), 32–52.
<https://doi.org/10.1177/2041386610380991>
- Halon, Y. (2020). *Stephanie Grisham: Democrats are using coronavirus “as a tool to politicize things and scare people”* [Text.Article]. Fox News; Fox News.
<https://www.foxnews.com/media/stephanie-grisham-calls-on-dems-to-stop-using-coronavirus-to-scare-public-for-political-points>
- Hamilton, L. C., Hartter, J., & Saito, K. (2015). Trust in scientists on climate change and vaccines. *Sage Open*, 5(3). <https://doi.org/10.1177/215824401560275>
- Hart, P. S., Chinn, S., & Soroka, S. (2020). Politicization and Polarization in COVID-19 News Coverage. *Science Communication*, 42(5), 679–697.
<https://doi.org/10.1177/1075547020950735>

- Hartmann, D., Gerteis, J., & Croll, P. R. (2009). An Empirical Assessment of Whiteness Theory: Hidden from How Many. *Social Problems*, 56, 403. <https://doi.org/10.1525/sp.2009.56.3.403>
- Heine, S. J., & Lehman, D. R. (1997). The cultural construction of self-enhancement: An examination of group-serving biases. *Journal of Personality and Social Psychology*, 72, 1268–1283. <https://doi.org/10.1037/0022-3514.72.6.1268>
- Henrich, J., & McElreath, R. (2003). The evolution of cultural evolution. *Evolutionary Anthropology: Issues, News, and Reviews*, 12(3), 123–135. <https://doi.org/10.1002/evan.10110>
- Hetherington, M. J., Weiler, J. D., & Weiler, P. J. D. (2009). *Authoritarianism and Polarization in American Politics*. Cambridge University Press.
- Hickson, D. J., Hinings, C. R., Lee, C. A., Schneck, R. E., & Pennings, J. M. (1971). A Strategic Contingencies' Theory of Intraorganizational Power. *Administrative Science Quarterly*, 16(2), 216–229. <https://doi.org/10.2307/2391831>
- Ho, A. K., Sidanius, J., Pratto, F., Levin, S., Thomsen, L., Kteily, N., & Sheehy-Skeffington, J. (2012). Social Dominance Orientation: Revisiting the Structure and Function of a Variable Predicting Social and Political Attitudes. *Personality and Social Psychology Bulletin*, 38(5), 583–606. <https://doi.org/10.1177/0146167211432765>
- Hoffarth, M. R., & Hodson, G. (2016). Green on the outside, red on the inside: Perceived environmentalist threat as a factor explaining political polarization of climate change. *Journal of Environmental Psychology*, 45, 40–49. <https://doi.org/10.1016/j.jenvp.2015.11.002>
- Hornsey, M. J., Majkut, L., Terry, D. J., & McKimmie, B. M. (2003). On being loud and proud: Non-conformity and counter-conformity to group norms. *British Journal of Social Psychology*, 42(3), 319–335. <https://doi.org/10.1348/014466603322438189>
- Houston, M. B., & Bettencourt, L. A. (1999). But that's not fair! An exploratory study of student perceptions of instructor fairness. *Journal of Marketing Education*, 21(2), 84-96. [10.1177/0273475399212002](https://doi.org/10.1177/0273475399212002)
- Hughes, J. N. (2011). Longitudinal effects of teacher and student perceptions of teacher-student relationship qualities on academic adjustment. *The Elementary school journal*, 112(1), 38-60. <https://doi.org/10.1086/660686>
- İnan-Kaya, G., & Rubie-Davies, C. M. (2022). Teacher classroom interactions and behaviours: Indications of bias. *Learning and Instruction*, 78, 101516. <https://doi.org/10.1016/j.learninstruc.2021.101516>

- Jackson, L. A., Lewandowski, D. A., Ingram, J. M., & Hodge, C. N. (1997). Group stereotypes: Content, gender specificity, and affect associated with typical group members. *Journal of Social Behavior and Personality*, *12*(2), 381.
- Jang, H., Reeve, J., Ryan, R. M., & Kim, A. (2009). Can self-determination theory explain what underlies the productive, satisfying learning experiences of collectivistically oriented Korean students?. *Journal of Educational Psychology*, *101*(3), 644. <https://doi.org/10.1037/a0014241>
- Jenkins, J. C. (1983). Resource Mobilization Theory and the Study of Social Movements. *Annual Review of Sociology*, *9*(1), 527–553. <https://doi.org/10.1146/annurev.so.09.080183.002523>
- Jenkins, J. C., & Perrow, C. (1977). Insurgency of the Powerless: Farm Worker Movements (1946-1972). *American Sociological Review*, *42*(2), 249–268. <https://doi.org/10.2307/2094604>
- Jenkins-Smith, H. C., Ripberger, J. T., Silva, C. L., Carlson, D. E., Gupta, K., Carlson, N., ... & Dunlap, R. E. (2020). Partisan asymmetry in temporal stability of climate change beliefs. *Nature Climate Change*, *10*(4), 322-328. <https://doi.org/10.1038/s41558-020-0719-y>
- Jost, J. T. (2017). Ideological Asymmetries and the Essence of Political Psychology. *Political Psychology*, *38*(2), 167–208. <https://doi.org/10.1111/pops.12407>
- Jost, J. T., Baldassarri, D. S., & Druckman, J. N. (2022). Cognitive–motivational mechanisms of political polarization in social-communicative contexts. *Nature Reviews Psychology*, *1*(10), 560-576. <https://doi.org/10.1038/s44159-022-00093-5>
- Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P., & Ostafin, B. (2007). Are Needs to Manage Uncertainty and Threat Associated With Political Conservatism or Ideological Extremity? *Personality and Social Psychology Bulletin*, *33*(7), 989–1007. <https://doi.org/10.1177/0146167207301028>
- Jost, J. T., Stern, C., Rule, N. O., & Sterling, J. (2017). The Politics of Fear: Is There an Ideological Asymmetry in Existential Motivation? *Social Cognition*, *35*(4), 324–353. <https://doi.org/10.1521/soco.2017.35.4.324>
- Jurkowitz, M., & Mitchell, A. (2020). Cable TV and COVID-19: How Americans perceive the outbreak and view media coverage differ by main news source. *Pew Research Center*.
- Kachanoff, F. J. (2017). *Collective Autonomy: Implications for Individual Group Members and Intergroup Relations* [Ph.D., McGill University (Canada)]. <https://www.proquest.com/docview/2516171718/abstract/47C51AE39E4642EBPQ/1>

- Kachanoff, F. J., Cooligan, F., Caouette, J., & Wohl, M. J. (2021). Free to fly the rainbow flag: the relation between collective autonomy and psychological well-being amongst LGBTQ+ individuals. *Self and Identity*, 20(6), 741-773. <https://doi.org/10.1080/15298868.2020.1768890>
- Kachanoff, F. J., Gray, K., Koestner, R., Kteily, N., & Wohl, M. J. A. (2022). Collective autonomy: Why groups fight for power and status. *Social and Personality Psychology Compass*, 16(1), e12652. <https://doi.org/10.1111/spc3.12652>
- Kachanoff, F. J., Kteily, N. S., Khullar, T. H., Park, H. J., & Taylor, D. M. (2020). Determining Our Destiny: Do Restrictions to Collective Autonomy Fuel Collective Action? *Journal Of Personality and Social Psychology*, 119(3), 600–632. <https://doi.org/10.1037/pspi0000217>
- Kachanoff, F. J., Taylor, D. M., Caouette, J., Khullar, T. H., & Wohl, M. J. A. (2019). The chains on all my people are the chains on me: Restrictions to collective autonomy undermine the personal autonomy and psychological well-being of group members. *Journal of Personality and Social Psychology*, 116(1), 141–165. <https://doi.org/10.1037/pspp0000177>
- Kappen, D. M. (2000). *Acknowledgement of racial privilege, endorsement of equality, and feelings of collective guilt via ingroup versus outgroup influence* [Ph.D., University of Kansas]. Retrieved December 21, 2022, from <https://www.proquest.com/docview/304603218/abstract/AA82839D9E7F4C42PQ/1>
- Karrer, R. N. (2011). THE NATIONAL RIGHT TO LIFE COMMITTEE: ITS FOUNDING, ITS HISTORY, AND THE EMERGENCE OF THE PRO-LIFE MOVEMENT PRIOR TO ROE V. WADE. *The Catholic Historical Review*, 97(3), 527–557.
- Kaufman, E. M., & Killen, M. (2022). Children’s Perspectives on Fairness and Inclusivity in the Classroom. *The Spanish Journal of Psychology*, 25, e28. <https://doi.org/10.1017/SJP.2022.24>
- Kelley, H. H. (1987). Attribution in social interaction. In *Attribution: Perceiving the causes of behavior* (pp. 1–26). Lawrence Erlbaum Associates, Inc.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). *Power, Approach, and Inhibition*.
- Kincaid, J., & Leckrone, J. W. (2020). Partisan Fractures in U.S. Federalism’s COVID-19 Policy Responses. *State and Local Government Review*, 52(4), 298–308. <https://doi.org/10.1177/0160323X20986842>
- Kitts, J. (2000). Mobilizing in Black Boxes: Social Networks and Participation in Social Movement Organizations. *Mobilization: An International Quarterly*, 5(2), 241–257. <https://doi.org/10.17813/maiq.5.2.5408016w34215787>

- Knowles, E. D., & Lowery, B. S. (2012). Meritocracy, Self-Concerns, and Whites' Denial of Racial Inequity. *Self and Identity*, 11(2), 202–222. <https://doi.org/10.1080/15298868.2010.542015>
- Knowles, E. D., Lowery, B. S., Chow, R. M., & Unzueta, M. M. (2014). Deny, distance, or dismantle? How white Americans manage a privileged identity. *Perspectives on Psychological Science*, 9(6), 594–609. <https://doi.org/10.1177/1745691614554658>
- Knowles, E. D., & Peng, K. (2005). White Selves: Conceptualizing and Measuring a Dominant-Group Identity. *Journal of Personality and Social Psychology*, 89, 223–241. <https://doi.org/10.1037/0022-3514.89.2.223>
- Knowles, E. D., Tropp, L. R., & Mogami, M. (2022). When White Americans see “non-Whites” as a group: Belief in minority collusion and support for White identity politics. *Group Processes & Intergroup Relations*, 25(3), 768–790. <https://doi.org/10.1177/13684302211030009>
- Koger, G., Masket, S., & Noel, H. (2009). Partisan Webs: Information Exchange and Party Networks. *British Journal of Political Science*, 39(3), 633–653. <https://doi.org/10.1017/S0007123409000659>
- Koski, J. E., Xie, H., & Olson, I. R. (2015). Understanding social hierarchies: The neural and psychological foundations of status perception. *Social Neuroscience*, 10(5), 527–550. <https://doi.org/10.1080/17470919.2015.1013223>
- Kostova, T., & Zaheer, S. (1999). Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise. *The Academy of Management Review*, 24(1), 64. <https://doi.org/10.2307/259037>
- Krackhardt, D. (1990). Assessing the Political Landscape: Structure, Cognition, and Power in Organizations. *Administrative Science Quarterly*, 35(2), 342–369. <https://doi.org/10.2307/2393394>
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498. <https://doi.org/10.1037/0033-2909.108.3.480>
- Kusurkar, R. A., Ten Cate, T. J., Vos, C. M. P., Westers, P., & Croiset, G. (2013). How motivation affects academic performance: a structural equation modelling analysis. *Advances in health sciences education*, 18, 57–69. <https://doi.org/10.1007/s10459-012-9354-3>
- Kwok, C., & Chan, N. K. (2017). Legitimacy and Forced Democratisation in Social Movements. *China Perspectives*, 2017(3), 7–16. <https://doi.org/10.4000/chinaperspectives.7375>
- Lalonde, R. N., & Silverman, R. A. (1994). Behavioral preferences in response to social injustice: The effects of group permeability and social identity salience. *Journal*

of *Personality and Social Psychology*, 66(1), 78–85. <https://doi.org/10.1037/0022-3514.66.1.78>

- Lardier, D. T., Herr, K. G., Barrios, V. R., Garcia-Reid, P., & Reid, R. J. (2019). Merit in Meritocracy: Uncovering the Myth of Exceptionality and Self-Reliance Through the Voices of Urban Youth of Color. *Education and Urban Society*, 51(4), 474–500. <https://doi.org/10.1177/0013124517727583>
- Ledgerwood, A., Mandisodza, A. N., Jost, J. T., & Pohl, M. J. (2011). Working for the system: Motivated defense of meritocratic beliefs. *Social Cognition*, 29(3), 322.
- Lewandowsky, S., Oberauer, K., & Gignac, G. E. (2013). NASA faked the moon landing—therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological science*, 24(5), 622–633.
- Little, B. (2017). How boarding schools tried to ‘kill the Indian’ through assimilation. *History. com*.
- Lopez, I. H. (1997). *White by Law: The Legal Construction of Race*. NYU Press.
- Louie, P., & Upenieks, L. (2022). Vicarious Discrimination, Psychosocial Resources, and Mental Health among Black Americans. *Social Psychology Quarterly*, 85(2), 187–209. <https://doi.org/10.1177/01902725221079279>
- Lowery, B. S., Knowles, E. D., & Unzueta, M. M. (2007). Framing Inequity Safely: Whites’ Motivated Perceptions of Racial Privilege. *Personality and Social Psychology Bulletin*, 33(9), 1237–1250. <https://doi.org/10.1177/0146167207303016>
- Lowery, B. S., Unzueta, M. M., Knowles, E. D., & Goff, P. A. (2006). Concern for the in-group and opposition to affirmative action. *Journal of Personality and Social Psychology*, 90(6), 961–974. <https://doi.org/10.1037/0022-3514.90.6.961>
- Lowman, J., & Lowman, J. (1984). *Mastering the techniques of teaching* (First edition.). San Francisco: Jossey-Bass.
- Lupton, R. N., Smallpage, S. M., & Enders, A. M. (2020). Values and political predispositions in the age of polarization: Examining the relationship between partisanship and ideology in the United States, 1988–2012. *British Journal of Political Science*, 50(1), 241–260. <https://doi.org/10.1017/S0007123417000370>
- Maggio, C. (2021). State-level immigration legislation and social life: The impact of the “show me your papers” laws. *Social Science Quarterly*, 102(4), 1654–1685. <https://doi.org/10.1111/ssqu.13018>
- Major, B., Blodorn, A., & Major Blascovich, G. (2018). The threat of increasing diversity: Why many White Americans support Trump in the 2016 presidential

- election. *Group Processes & Intergroup Relations*, 21(6), 931-940.
<https://doi.org/10.1177/1368430216677304>
- Major, B., Kaiser, C. R., O'Brien, L. T., & McCoy, S. K. (2007). Perceived discrimination as worldview threat or worldview confirmation: Implications for self-esteem. *Journal of Personality and Social Psychology*, 92(6), 1068–1086.
<https://doi.org/10.1037/0022-3514.92.6.1068>
- Martínez, A.D., Mercado, E., Barbieri, M., Kim, S. Y., & Granger, D. (2021). The importance of biobehavioral research to examine the physiological effects of ethnic and racial discrimination in the Latinx population. *Frontiers in Public Health*. doi: 10.3389/fpubh.2021.762735
- McDermott, M., & Samson, F. L. (2005). White Racial and Ethnic Identity in the United States. *Annual Review of Sociology*, 31, 245–261.
<https://doi.org/10.1146/annurev.soc.31.041304.122322>
- McCarthy, J. D., & Zald, M. N. (1977). Resource Mobilization and Social Movements: A Partial Theory. *American Journal of Sociology*, 82(6), 1212–1241.
- McGahey, R. (2021). *Zoning, Housing Regulation, And America's Racial Inequality*. Forbes. Retrieved May 16, 2023, from
<https://www.forbes.com/sites/richardmcsahey/2021/06/30/zoning-housing-regulation-and-americas-racial-inequality/>
- McVeigh, R. (2009). *The rise of the Ku Klux Klan: Right-wing movements and national politics* (Vol. 32). U of Minnesota Press.
- McVeigh, R., Myers, D. J., & Sikkink, D. (2004). Corn, Klansmen, and Coolidge: Structure and Framing in Social Movements. *Social Forces*, 83(2), 653–690.
<https://doi.org/10.1353/sof.2005.0019>
- Meyer, D. S., & Staggenborg, S. (1996). Movements, countermovements, and the structure of political opportunity. *American journal of sociology*, 101(6), 1628-1660. <https://doi.org/10.1086/230869>
- Meyer, J. W., & Rowan, B. R. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Mitchell, C. (2017, October 25). Some States With “English-Only” Laws Won’t Offer Tests in Other Languages. *Education Week*. <https://www.edweek.org/policy-politics/some-states-with-english-only-laws-wont-offer-tests-in-other-languages/2017/10>
- Mitchel, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really

- Counts. *The Academy of Management Review*, 22(4), 853–886.
<https://doi.org/10.2307/259247>
- Morris, M. W., & Larrick, R. P. (1995). When one cause casts doubt on another: A normative analysis of discounting in causal attribution. *Psychological Review*, 102, 331–355. <https://doi.org/10.1037/0033-295X.102.2.331>
- Morrison, K. R., Fast, N. J., & Ybarra, O. (2009). Group status, perceptions of threat, and support for social inequality. *Journal of Experimental Social Psychology*, 45(1), 204–210.
- Morrison, K. R., & Ybarra, O. (2008). The effects of realistic threat and group identification on social dominance orientation. *Journal of Experimental Social Psychology*, 44(1), 156–163. <https://doi.org/10.1016/j.jesp.2006.12.006>
- Moss, A. J., Blodorn, A., Van Camp, A. R., & O'Brien, L. T. (2019). Gender equality, value violations, and prejudice toward Muslims. *Group Processes & Intergroup Relations*, 22(2), 288–301. <https://doi.org/10.1177/1368430217716751>
- Motta, M., Stecula, D., & Farhart, C. (2020). How Right-Leaning Media Coverage of COVID-19 Facilitated the Spread of Misinformation in the Early Stages of the Pandemic in the U.S. *Canadian Journal of Political Science*, 53(2), 335–342.
- Mottl, T. L. (1980). The Analysis of Countermovements. *Social Problems*, 27(5), 620–635. <https://doi.org/10.2307/800200>
- Moyer, B. (2001). *Doing democracy: The MAP model for organizing social movements*. Gabriola Island, BC : New Society Publishers.
<http://archive.org/details/doingdemocracyma00moye>
- Najarro, I. (2022). How laws on race, sexuality could clash with culturally responsive teaching. *Educ. Week*. <https://www.edweek.org/policy-politics/how-laws-on-race-sexuality-could-clash-with-culturally-responsive-teaching/2022/04>
- Nexon, D. (1971). Asymmetry in the Political System: Occasional Activists in the Republican and Democratic Parties, 1956-1964. *The American Political Science Review*, 65(3), 716–730. <https://doi.org/10.2307/1955516>
- Nisbet, M. C. (2005). The competition for worldviews: Values, information, and public support for stem cell research. *International Journal of Public Opinion Research*, 17(1), 90–112. <https://doi.org/10.1093/ijpor/edh058>
- Nisbet, E. C., Cooper, K. E., & Garrett, R. K. (2015). The partisan brain: How dissonant science messages lead conservatives and liberals to (dis) trust science. *The ANNALS of the American Academy of Political and Social Science*, 658(1), 36–66. DOI: 10.1177/0002716214555474

- Norton, M. I., & Sommers, S. R. (2011). Whites See Racism as a Zero-Sum Game That They Are Now Losing. *Perspectives on Psychological Science*, 6(3), 215–218. <https://doi.org/10.1177/1745691611406922>
- Ng, S. H. (1989). Intergroup behaviour and the self. *New Zealand Journal of Psychology*, 18(1), 1-12.
- Nguyen, T. T., Criss, S., Dwivedi, P., Huang, D., Keralis, J., Hsu, E., ... & Nguyen, Q. C. (2020). Exploring US shifts in anti-Asian sentiment with the emergence of COVID-19. *International Journal of Environmental Research and Public Health*, 17(19), 7032. <https://doi.org/10.3390/ijerph17197032>
- Nutter, K. B. (2010). Boston, Busing, and the Bicentennial of 1976. *Historical Journal of Massachusetts*, 24.
- Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior*, 32(2), 303-330. <https://doi.org/10.1007/s11109-010-9112-2>
- Oberschall, A. (1973). *Social conflict and social movements*. Englewood Cliffs., NJ: Prentice-Hall.
- Okonofua, J. A., Walton, G. M., & Eberhardt, J. L. (2016). A vicious cycle: A social–psychological account of extreme racial disparities in school discipline. *Perspectives on Psychological Science*, 11(3), 381-398. <https://doi.org/10.1177/1745691616635592>
- Outten, H. R., Schmitt, M. T., Miller, D. A., & Garcia, A. L. (2012). Feeling Threatened About the Future: Whites’ Emotional Reactions to Anticipated Ethnic Demographic Changes. *Personality and Social Psychology Bulletin*, 38(1), 14–25. <https://doi.org/10.1177/0146167211418531>
- Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. *The Counseling Psychologist*, 38(7), 1001-1043. DOI:[10.1177/0011000010374775](https://doi.org/10.1177/0011000010374775)
- Oyserman, D., Johnson, E., & James, L. (2011). Seeing the destination but not the path: Effects of socioeconomic disadvantage on school-focused possible self content and linked behavioral strategies. *Self and Identity*, 10(4), 474-492. <https://doi.org/10.1080/15298868.2010.487651>
- Oyserman, D., & Lewis Jr, N. A. (2017). Seeing the destination AND the path: Using identity-based motivation to understand and reduce racial disparities in academic achievement. *Social Issues and Policy Review*, 11(1), 159-194. <https://doi.org/10.1111/sipr.12030>
- Panno, A., Carrus, G., Brizi, A., Maricchiolo, F., Giacomantonio, M., & Mannetti, L. (2018). Need for cognitive closure and political ideology: Predicting pro-

- environmental preferences and behavior. *Social Psychology*, 49(2), 103–112. <https://doi.org/10.1027/1864-9335/a000333>
- Padilla, A. M., Lindholm, K. J., Chen, A., Durán, R., Hakuta, K., Lambert, W., & Tucker, G. R. (1991). The English-only movement: Myths, reality, and implications for psychology. *American Psychologist*, 46(2), 120. <https://doi.org/10.1037/0003-066X.46.2.120>
- Paulus, P. B., & Kenworthy, J. B. (2022). The crowd dynamics and collective stupidity of the January 6 riot: Theoretical analyses and prescriptions for a collectively wiser future. *Group Dynamics: Theory, Research, and Practice*. <https://doi.org/10.1037/gdn0000184>
- Perrow, C. (1979). The sixties observed. *The dynamics of social movements, 192211*.
- Perry, P. (2002). *Shades of White: White Kids and Racial Identities in High School*. Duke University Press.
- Perry, S. L., Whitehead, A. L., & Grubbs, J. B. (2022). “I Don’t Want Everybody to Vote”: Christian Nationalism and Restricting Voter Access in the United States. *Sociological Forum* (Vol. 37, No. 1, pp. 4-26). <https://doi.org/10.1111/socf.12776>
- Pfaff, S. (1996). *Collective Identity and Informal Groups in Revolutionary Mobilization East Germany in 1989*. 27.
- Phillips, L. T., & Lowery, B. S. (2020). I ain’t no fortunate one: On the motivated denial of class privilege. *Journal of Personality and Social Psychology*, 119(6), 1403–1422. <https://doi.org/10.1037/pspi0000240>
- Phinney, J. S. (1996). Understanding ethnic diversity. *The American Behavioral Scientist*, 40(2), 143–152. <https://www.proquest.com/docview/214752050/abstract/A36A61A5CDF84958P/Q/1>
- Polletta, F. (1996). Review of Cultural Politics and Social Movements.; Social Movements and Culture. [Review of *Review of Cultural Politics and Social Movements.*; *Social Movements and Culture.*, by M. Darnovsky, B. Epstein, R. Flacks, H. Johnston, & B. Klandermans]. *Contemporary Sociology*, 25(4), 483–485. <https://doi.org/10.2307/2077085>
- Powell, A. A., Branscombe, N. R., & Schmitt, M. T. (2005). Inequality as ingroup privilege or outgroup disadvantage: The impact of group focus on collective guilt and interracial attitudes. *Personality and Social Psychology Bulletin*, 31(4), 508–521. <https://doi.org/10.1177/0146167204271713>
- Pratto, F. (2016). On power and empowerment. *British Journal of Social Psychology*, 55(1), 1–20. <https://doi.org/10.1111/bjso.12135>

- Pratto, F., Pearson, A. R., Lee, I.-C., & Saguy, T. (2008). Power Dynamics in an Experimental Game. *Social Justice Research, 21*(3), 377–407.
<https://doi.org/10.1007/s11211-008-0075-y>
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*(4), 741–763.
<https://doi.org/10.1037/0022-3514.67.4.741>
- Radke, H. R. M., Kutlaca, M., Siem, B., Wright, S. C., & Becker, J. C. (2020). Beyond Allyship: Motivations for Advantaged Group Members to Engage in Action for Disadvantaged Groups. *Personality and Social Psychology Review, 24*(4), 291–315. <https://doi.org/10.1177/1088868320918698>
- Rasmussen, R., Levari, D. E., Akhtar, M., Crittle, C. S., Gately, M., Pagan, J., ... & Urry, H. L. (2022). White (but Not Black) Americans Continue to See Racism as a Zero-Sum Game; White Conservatives (but Not Moderates or Liberals) See Themselves as Losing. *Perspectives on Psychological Science, 17*(6), 1800-1810.
<https://doi.org/10.1177/17456916221082111>
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and emotion, 28*, 147-169. <https://doi.org/10.1023/B:MOEM.0000032312.95499.6f>
- Reicher, S. D. (1996). 'The Battle of Westminster': Developing the social identity model of crowd behaviour in order to explain the initiation and development of collective conflict. *European Journal of Social Psychology, 26*(1), 115–134.
[https://doi.org/10.1002/\(SICI\)1099-0992\(199601\)26:1<115::AID-EJSP740>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1099-0992(199601)26:1<115::AID-EJSP740>3.0.CO;2-Z)
- Rekker, R. (2021). The nature and origins of political polarization over science. *Public Understanding of Science, 30*(4), 352-368.
<https://doi.org/10.1177/0963662521989193>
- Rios, K., Mischkowski, D., & Stephenson, N. B. (2022). White People Problems? White Privilege Beliefs Predict Attitudes Toward Confederate Symbols. *Social Psychological and Personality Science, 13*(7), 1105–1113.
<https://doi.org/10.1177/19485506211051913>
- Rivera-Rodriguez, A. (2021). Teacher's Discipline Practices and Race: The Effect of "Fair" and "Unfair" Discipline on Black and White Student's Perceptions and Behaviors. <https://doi.org/10.7275/22466519.0>
- Rivera-Rodriguez, A., Larsen, G., & Dasgupta, N. (2021). Changing public opinion about gender activates group threat and opposition to feminist social movements among men. *Group Processes & Intergroup Relations, 13*684302211048884.
<https://doi.org/10.1177/13684302211048885>

- Rodabaugh, R. C., & Kravitz, D. A. (1994). Effects of Procedural Fairness on Student Judgments of Professors. *Journal on Excellence in College Teaching*, 5(2), 67-83.
- Ruisch, B. C., & Ferguson, M. J. (2022). Changes in Americans' prejudices during the presidency of Donald Trump. *Nature Human Behaviour*, 6(5), Article 5. <https://doi.org/10.1038/s41562-021-01287-2>
- Ruiz, N. G., Edwards, K., & Lopez, M. H. (2021). One-third of Asian Americans fear threats, physical attacks and most say violence against them is rising. <https://www.pewresearch.org/short-reads/2021/04/21/one-third-of-asian-americans-fear-threats-physical-attacks-and-most-say-violence-against-them-is-rising/>
- Ryan, R. M., & Deci, E. L. (2013). Toward a Social Psychology of Assimilation: Self-Determination Theory in Cognitive. *Self-regulation and autonomy: Social and developmental dimensions of human conduct*, 40, 191.
- Safa, H. I. (1990). Women's Social Movements in Latin America. *Gender and Society*, 4(3), 354-369.
- Salancik, G. R., & Pfeffer, J. (1978). A Social Information Processing Approach to Job Attitudes and Task Design. *Administrative Science Quarterly*, 23(2), 224-253. <https://doi.org/10.2307/2392563>
- Sapolsky, R. M. (2005). The influence of social hierarchy on primate health. *Science (New York, N.Y.)*, 308(5722), 648-652. <https://doi.org/10.1126/science.1106477>
- Schmuck, D., & Matthes, J. (2017). Effects of Economic and Symbolic Threat Appeals in Right-Wing Populist Advertising on Anti-Immigrant Attitudes: The Impact of Textual and Visual Appeals. *Political Communication*, 34(4), 607-626. <https://doi.org/10.1080/10584609.2017.1316807>
- Schnurer, E. (2017, September 14). *The Rise of Zero-Sum Politics*. US News & World Report. <http://www.usnews.com/opinion/thomas-jefferson-street/articles/2017-09-14/donald-trump-and-the-rise-of-zero-sum-politics>
- Schwalbe, M. C., Cohen, G. L., & Ross, L. D. (2020). The objectivity illusion and voter polarization in the 2016 presidential election. *Proceedings of the National Academy of Sciences*, 117(35), 21218-21229. <https://doi.org/10.1073/pnas.1912301117>
- Schwalbe, M., Godwin, S., Holden, D., Schrock, D., Thompson, S., & Wolkomir, M. (2000). Generic Processes in the Reproduction of Inequality: An Interactionist Analysis. *Social Forces*, 79(2), 419-452. <https://doi.org/10.2307/2675505>
- Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1998). The self-serving bias in relational context. *Journal of Personality and Social Psychology*, 74, 378-386. <https://doi.org/10.1037/0022-3514.74.2.378>

- Selvanathan, H. P., Lickel, B., & Jetten, J. (2021). Collective psychological ownership and the rise of reactionary counter-movements defending the status quo. *British Journal of Social Psychology*, *60*(2), 587-609. <https://doi.org/10.1111/bjso.12418>
- Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. Houghton Mifflin.
- Sherkat, D. E., Powell-Williams, M., Maddox, G., & de Vries, K. M. (2011). Religion, politics, and support for same-sex marriage in the United States, 1988–2008. *Social Science Research*, *40*(1), 167–180. <https://doi.org/10.1016/j.ssresearch.2010.08.009>
- Shertzer, A., Twinam, T., & Walsh, R. P. (2022). Zoning and segregation in urban economic history. *Regional Science and Urban Economics*, *94*, 103652. <https://doi.org/10.1016/j.regsciurbeco.2021.103652>
- Shih, M., & Sanchez, D. T. (2005). Perspectives and Research on the Positive and Negative Implications of Having Multiple Racial Identities. *Psychological Bulletin*, *131*(4), 569–591. <https://doi.org/10.1037/0033-2909.131.4.569>
- Sidanius, J., Singh, P., Hetts, J. J., & Federico, C. (2000). It's not affirmative action, it's the Blacks: The continuing relevance of race in American politics. *Racialized politics: The debate about racism in America*, 191-235.
- Silverman, D. M., Rosario, R. J., Hernandez, I. A., & Destin, M. (2023). The Ongoing Development of Strength-Based Approaches to People Who Hold Systemically Marginalized Identities. *Personality and Social Psychology Review*, *0*(0). <https://doi.org/10.1177/10888683221145243>
- Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social psychological analysis. *American Psychologist*, *56*(4), 319–331. <https://doi.org/10.1037/0003-066X.56.4.319>
- Skocpol, T. (1979). State and Revolution: Old Regimes and Revolutionary Crises in France, Russia, and China. *Theory and Society*, *7*(1/2), 7–95.
- Smith, H. J., Pettigrew, T. F., Pippin, G. M., & Bialosiewicz, S. (2012). Relative deprivation: A theoretical and meta-analytic review. *Personality and social psychology review*, *16*(3), 203-232. <https://doi.org/10.1177/10888683114308>
- Smith, L. V., Wang, M. T., & Hill, D. J. (2020). Black Youths' perceptions of school cultural pluralism, school climate and the mediating role of racial identity. *Journal of School Psychology*, *83*, 50-65. <https://doi.org/10.1016/j.jsp.2020.09.002>
- Snow, D. A., Zurcher, L. A., & Eklund-Olson, S. (1980). Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment. *American Sociological Review*, *45*(5), 787–801. <https://doi.org/10.2307/2094895>

- Somaskanda, S. (2022, June 5). Why education has become a political battlefield in America. *dw.com*. <https://www.dw.com/en/why-education-has-become-a-political-battlefield-in-america/a-62017306>
- Stieb, M. (2020, March 10). *Fox Business Network: COVID-19 Is a 'Coronavirus Impeachment Scam.'* *Intelligencer*. <https://nymag.com/intelligencer/2020/03/fox-business-covid-19-is-a-coronavirus-impeachment-scam.html>
- Steil, J. P., & Vasi, I. B. (2014). The New Immigration Contestation: Social Movements and Local Immigration Policy Making in the United States, 2000–2011. *American Journal of Sociology*, *119*(4), 1104–1155. <https://doi.org/10.1086/675301>
- Steinberg, L., & Silverberg, S. B. (1986). The vicissitudes of autonomy in early adolescence. *Child development*, 841-851. <https://doi.org/10.2307/1130361>
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In *Reducing prejudice and discrimination* (pp. 23–45). Lawrence Erlbaum Associates Publishers.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, *20*(3), 571–610. <https://doi.org/10.2307/258788>
- Swirsky, S. A. (2001). Minority Voter Intimidation: The Problem That Won't Go Away. *Temple Political & Civil Rights Law Review*, *11*, 359.
- Tajfel, H. (Ed.). (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. Academic Press.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson Hall.
- Tajfel, H., & Turner, J. C. (2004). The Social Identity Theory of Intergroup Behavior. In J. T. Jost & J. Sidanius (Eds.), *Political Psychology* (0 ed., pp. 276–293). Psychology Press. <https://doi.org/10.4324/9780203505984-16>
- Tamura, E. H. (2002). African American vernacular English and Hawai'i Creole English: A comparison of two school board controversies. *Journal of Negro Education*, *17*-*30*. <https://www.jstor.org/stable/3211222>
- Tarrant, M., North, A. C., Edridge, M. D., Kirk, L. E., Smith, E. A., & Turner, R. E. (2001). Social identity in adolescence. *Journal of adolescence*, *24*(5), 597-609. <https://doi.org/10.1006/jado.2000.0392>
- Taylor, D. M., & McKirnan, D. J. (1984). Theoretical contributions: A five-stage model of intergroup relations. *British Journal of Social Psychology*, *23*(4), 291–300. <https://doi.org/10.1111/j.2044-8309.1984.tb00644.x>

- Thomas, A. J., Barrie, R., Brunner, J., Clawson, A., Hewitt, A., Jeremie-Brink, G., & Rowe-Johnson, M. (2014). Assessing critical consciousness in youth and young adults. *Journal of research on adolescence, 24*(3), 485-496. <https://doi.org/10.1111/jora.12132>
- Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of educational psychology, 99*(2), 253. <https://doi.org/10.1037/0022-0663.99.2.253>
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. basil Blackwell.
- Van Assendelft, L. (1999). *Encyclopedia of Women in American Politics* (No. 1). Greenwood Publishing Group.
- Van der Toorn, J., Jost, J. T., Packer, D. J., Noorbaloochi, S., & Van Bavel, J. J. (2017). In Defense of Tradition: Religiosity, Conservatism, and Opposition to Same-Sex Marriage in North America. *Personality and Social Psychology Bulletin, 43*(10), 1455–1468. <https://doi.org/10.1177/0146167217718523>
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an Integrative Social Identity Model of Collective Action: A Quantitative Research Synthesis of Three Socio-Psychological Perspectives. *Psychological Bulletin, 134*, 504–535. <https://doi.org/10.1037/0033-2909.134.4.504>
- Walsh, D. J., & Maffei, M. J. (1994). Never in a Class by Themselves: An Examination of Behaviors Affecting the Student-Professor Relationship. *Journal on Excellence in College Teaching, 5*(2), 23-49.
- Weber, L. (1947). *The Theory of Social and Economic Organization*. New York: Oxford University Press.
- Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: a test of self-determination theory. *Journal of personality and social psychology, 70*(4), 767. <https://doi.org/10.1037/0022-3514.70.4.767>
- Williams, P. N., & Lovin, R. W. (1978). Rights and Remedies: A Study of Desegregation in Boston. *The Journal of Religious Ethics, 6*(2), 137–163.
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20–47. <https://doi.org/10.1007/s10865-008-9185-0>
- Wise, A. (2021, October 17). The political fight over vaccine mandates deepens despite their effectiveness. *NPR*. <https://www.npr.org/2021/10/17/1046598351/the-political-fight-over-vaccine-mandates-deepens-despite-their-effectiveness>

- Wohl, M. J., Branscombe, N. R., & Klar, Y. (2006). Collective guilt: Emotional reactions when one's group has done wrong or been wronged. *European review of social psychology*, 17(1), 1-37. <https://doi.org/10.1080/10463280600574815>
- Wong, C., & Cho, G. E. (2005). Two-Headed Coins or Kandinskys: White Racial Identification. *Political Psychology*, 26(5), 699–720. <https://doi.org/10.1111/j.1467-9221.2005.00440.x>
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of personality and social psychology*, 58(6), 994.
- Xiao, Y. J., & Van Bavel, J. J. (2012). See Your Friends Close and Your Enemies Closer: Social Identity and Identity Threat Shape the Representation of Physical Distance. *Personality and Social Psychology Bulletin*, 38(7), 959–972. <https://doi.org/10.1177/0146167212442228>
- Zald, M. N., & Ash, R. (1966). SOCIAL MOVEMENT ORGANIZATIONS: GROWTH, DECAY AND CHANGE. *SOCIAL FORCES*, 15.