THE UNIVERSITY OF CHICAGO

CRITICAL NARRATIVES COUNTER PSYCHOLOGICAL AND STRUCTURAL BARRIERS TO RACIAL EQUITY

A DISSERTATION SUBMITTED TO THE FACULTY OF THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

BY
CINTIA PRECIADO HINOJOSA

CHICAGO, ILLINOIS
AUGUST 2023

Copyright © 2023 by Cintia Preciado Hinojosa All Rights Reserved

Table of Contents

Lis	st of Tables	iv
Lis	st of Figures	v
At	ostract	vi
Ov	verview	1
1	Critical Narratives Undermine Punitive Bias Towards Community Gun Violence Policies 1.1. A critical narrative reduces punitive policy preferences	4 18
	punitive preferences	2630
	preferences	40
2	Using Critical Narratives to Promote Youth Gun Violence Prevention	50 56 65
A	Chapter 1 Supplemental Information	75
В	Ch.1 Study 1 Supplemental Information	77
C	Ch.1 Study 1 Full Sample Supplemental Information	83
D	Ch.1 Study 2 Supplemental Information	87
Е	Ch.1 Study 3 Supplemental Information	95
F	Ch.1 Study 4 Supplemental Information	118
G	Ch 2. Study 2 Supplemental Information	136
Re	eferences	148

List of Tables

1.1	Main Hypotheses Across Studies 1 to 4, Chapter 1	17
1.2	Punitive Policy Support by Condition and Political Orientation in Study 1	23
1.3	Restorative Policy Support by Condition and Political Orientation in Study 1	24
1.4	Post-hoc Comparisons of Punitive Policy Support by Condition in Study 3	35
1.5	Post-hoc Comparisons of Restorative Policy Support by Condition in Study 3	36
1.6	Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation	
	in Study 3	37
1.7	Post-hoc Comparisons of Attributions by Condition in Study 3	38
1.8	Attributions Mediating Punitive Support in Study 3	39
1.9	Post-hoc Comparisons of Punitive Policy Support by Condition in Study 4	43
1.10	Post-hoc Comparisons of Willingness to Share by Condition in Study 4	44
2.1	Exploratory Hypotheses for Study 1, Chapter 2	57
2.2	Main Hypotheses for Study 2, Chapter 2	65
2.3	Mean Differences in Construals of Activism by Condition in Chicago Pilot RCT	71
2.4	Mean Differences in Construals of Activism by Condition in El Paso Pilot RCT	71
A.1	Participant Sociodemographics across Chapter 1 Studies	75
A.2	Descriptive Statistics of Main Dependent Variables across Chapter 1	76
B.1	Descriptive Statistics and Correlations of Policy Variables Items in Study 1	78
B.2	Punitive Policy Support by Condition in Study 1	79
B.3	Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orienta-	
	tion in Study 1	80
B.4	Restorative Policy Support by Condition in Study 1	81
B.5	Post-hoc Comparisons of Restorative Policy Support by Condition and Political Ori-	
	entation in Study 1	82
C .1	Participant Sociodemographics in Study 1 Full Sample	83
C.2	Post-hoc Comparisons of Punitive Policy Support by Condition in Study 1 Full Sample	84
C.3	Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orienta-	
	tion in Study 1 Full Sample	85
C.4	Post-hoc Comparisons of Restorative Policy Support by Condition and Political Ori-	
	entation in Study 1	86
D.1	Descriptive Statistics of Policy Support Scales and Items in Study 2	88
D.2	Punitive Policy Support by Condition in Study 2	89
D.3	Punitive Policy Support by Condition and Political Orientation in Study 2	90
D.4	Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orienta-	
	tion in Study 2	91
D.5	Restorative Policy Support by Condition in Study 2	92
D.6	Restorative Policy Support by Condition and Political Orientation in Study 2	93

D.7	Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 2
E.1	Descriptive Statistics of Main Dependent Variables in Study 3
E.2	Descriptive Statistics and Correlations of Main Dependent Variables in Study 3 97
E.3	Descriptive Statistics of Policy Support Scales and Items in Study 3
E.4	Punitive Policy Support by Condition in Study 3
E.5	Post-hoc Comparisons of Punitive Policy Support by Condition in Study 3 100
E.6	Punitive Policy Support by Condition and Political Orientation in Study 3 101
E.7	Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orienta-
	tion in Study 3
E.8	Restorative Policy Support by Condition in Study 3
E.9	Post-hoc Comparisons of Restorative Policy Support by Condition in Study 3 104
	Restorative Policy Support by Condition and Political Orientation in Study 3 105
	Post-hoc Comparisons of Restorative Policy Support by Condition and Political Ori-
	entation in Study 3
E.12	Post-hoc Comparisons of Punitive Budget Allocation by Condition in Study 3 107
	Post-hoc Comparisons of Punitive Budget Allocation by Condition and Political Ori-
	entation in Study 3
E.14	Post-hoc Comparisons of Willingness to Share by Condition in Study 3 109
	Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation
	in Study 3
E.16	Attributions for Community Gun Violence by Condition in Study 3
	Post-hoc Comparisons of Attributions by Condition in Study 3
	Attributions Mediating Punitive Support in Study 3
	Causal Attributions Mediating Restorative Support in Study 3
F.1	Descriptive Statistics of Main Dependent Variables in Study 4
F.2	Descriptive Statistics and Correlations of Main Dependent Variables in Study 4 120
F.3	Punitive Policy Support by Condition in Study 4
F.4	Post-hoc Comparisons of Punitive Policy Support by Condition in Study 4
F.5	Punitive Policy Support by Condition and Political Orientation in Study 4
F.6	Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orienta-
	tion in Study 4
F.7	Restorative Policy Support by Condition in Study 4
F.8	Post-hoc Comparisons of Restorative Policy Support by Condition in Study 4 126
F.9	Restorative Policy Support by Condition and Political Orientation in Study 4 127
F.10	Post-hoc Comparisons of Restorative Policy Support by Condition and Political Ori-
544	entation in Study 4
	Punitive Policy Support at Time 2 by Condition in Study 4
	Restorative Policy Support at Time 2 by Condition in Study 4
F.13	Post-hoc Comparisons of Restorative Policy Support at Time 2 by Condition and Po-
Б14	litical Orientation in Study 4
F.14	Willingness to Share by Condition in Study 4

F.15	Post-hoc Comparisons of Willingness to Share by Condition in Study 4
F.16	Willingness to Share Memo by Condition and Political Orientation in Study 4 134
F.17	Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation in Study 4
G.1	Descriptive Statistics and Correlations of Construal Items in the Combined Pilot RCT Sample
G.2	Mean Differences in Construals of Guns and Activism by Condition in the Combined Pilot RCT Sample
G.3	Mean Differences in Construals of Guns and Activism by Condition in the Combined Pilot RCT Sample

List of Figures

1.1	Punitive Policy Support by Condition and Political Orientation in Study 1	23
1.2	Restorative Policy Support by Condition in and Political Orientation in Study 1	25
1.3	Punitive Policy Support by Condition in Study 2	29
1.4	Restorative Policy Support by Condition and Political Orientation in Study 2	29
1.5	Image of the willingness to share measure presented to participants in Study 3	34
1.6	Preferences for investing in policing versus communities in a zero-sum violence pre-	
	vention budget allocation task by condition and political orientation	37
1.7	Plots of Support for Restorative Policies by Condition and Political Orientation in	
	Study 3	38
1.8	Mediation diagram of the critical effect on punitive policy support through attributions	
	in Study 3	40
1.9	Interaction Plot of Willingness to Share by Condition and Political Orientation in Study 4	44
2.1	Main Themes and Participant Excerpts from Focus Group Discussions	63
2.2	Plots Comparing Construals of Activism in the Combined Pilot RCT	70
2.3	Plots Comparing Construals of Guns and Gun Carrying in the Combined Pilot RCT	
	, ,	
E.1	Plot of Willingness to Share by Condition in Study 3	
E.2	Willingness to Share by Condition and Political Orientation in Study 3	
E.3	Plot of Willingness to Share by Condition in Study 4	117
G.1	Perceived Social Status of Gun Carrying in the Chicago Pilot RCT	140
G.2	Appeal of Gun Carrying in the Chicago Pilot RCT	
G.3	Perceived Social Status of Activism in the Chicago Pilot RCT	
G.4	Appeal of Activism in the Chicago Pilot RCT	
G.5	Perceived Social Status of Gun Carrying in the El Paso Pilot RCT	
G.6	Appeal of Gun Carrying in the El Paso Pilot RCT	145
G.7	Perceived Social Status of Activism in the El Paso Pilot RCT	
G.8	Appeal of Activism in the El Paso Pilot RCT	147

Abstract

Narratives on politically contentious topics, such as racism and gun violence, trigger polarizing attitudes and implicit racial biases. These psychological responses exacerbate patterns of systemic harm against historically marginalized communities and impede equitable policy solutions. This dissertation tests whether changing the narrative about racial patterns in gun violence can increase support for effective policies and encourage change among vulnerable youth. I examine the impact of critical narratives that explain how structural racism is a root cause of current racial disparities and social policy problems. In Chapter 1, online experimental studies test how critical narratives on gun violence in poor communities of color can shift policy preferences across political orientation. Chapter 2 presents the development and experimental results of a critical narrative on youth violence prevention using design-thinking methods. Compared to traditional youth behavior change narratives, the critical narrative promotes protective behaviors by reframing gun carrying as playing into racist narratives and scaffolding community activism as an empowering path to fight back. I evaluate the effectiveness of the critical narrative compared to traditional youth violence prevention narratives among high school students in Chicago and Texas. Results suggest that critical narratives are a promising route to address racialized policy issues by empowering communities by influencing public policy support and scaffolding youth activism.

Overview

Gun violence is the leading cause of death among young people in the U.S. Homicides account for over 60% of total gun deaths for ages 25 and under (CDC, 2021; Goldstick et al., 2021, 2022). However, like many issues in American society, a closer look at the data reveal major differences that disproportionately impact historically minoritized groups (Bailey et al., 2017; Wildeman & Wang, 2017; Williams & Collins, 2001; Williams & Jackson, 2005). For example, Black Americans make up 13% of the population but account for 60% of all gun homicides, most of which occur in urban neighborhoods with high rates of poverty and racial segregation (CDC, 2021; Cheon et al., 2020; Frazer et al., 2017).

Although gun violence is a widely-shared concern, experts disagree on which public safety strategies policymakers should prioritize (Cook & Ludwig, 2019; Gee, 2022; Ludwig & Shah, 2014; Wolf & Rosen, 2015). The dominant narratives about reducing gun violence focus on keeping guns and criminals off the streets through increased law enforcement (Braga et al., 2018; McGinty et al., 2014; The White House, 2022; Vasilogambros, 2022). However, punitive approaches can exacerbate the root causes of violence by further destabilizing neighborhoods that are already overly targeted by policing and mass incarceration (Futterman et al., 2016; Kovera, 2019; Lynch, 1997; Miller, 2022; National Research Council, 2014; Sampson et al., 2002; Wildeman & Wang, 2017).

A restorative approach instead aims to repair the harm caused by a racist history of segregation, divestment, and disenfranchisement has caused to many of these neighborhoods (Alexander, 2010; Massey, 1993; Rothstein, 2017; Sampson et al., 2002; Williams & Collins, 2001; Williams & Mohammed, 2013). With this context in mind, restorative approaches seek to prevent violence by establishing routes for socioeconomic mobility and other positive support structures (Bieler et al., 2016; David-Ferdon et al., 2016; Edley et al., 2008; The Joyce Foundation, 2019, 2022; Tsui, 2014). The racial patterns in gun homicides and the history of systemic oppression suggest that reducing gun violence requires a critical examination of what it

means to do so in an equitable manner.

This dissertation examines how certain narratives about racialized social problems can strengthen or remedy the structural and psychological factors that contribute to the problem. Using community gun violence (hereafter CGV)¹ as a problem space, I examine a psychological approach to shifting attitudes and behaviors that advance equity-oriented solutions. I seek to use critical narratives to disrupt the process in which how mainstream narratives reinforce psychological and structural processes that maintain racial inequity. This approach is guided by critical social theories developed to arm scholars and the public to challenge the systemic mechanisms underlying racial inequities (Collins, 2019b; Crenshaw et al., 1995; Delgado & Stefancic, 2017; Freire, 1970; Lewin & Iowa Child Welfare Research Station, 1937).

Chapter 1 explores the impact of adopting critically informed narratives that run counter to conventional narratives when discussing racial inequalities, such as the issue of "gun violence in poor communities of color." I present a series of experimental studies that test whether a critical narrative about the causal connection between CGV and racism influences support for punitive versus restorative approaches to reducing violence, compared to (a) individualized narratives that explain how individual deficiencies in socioemotional skills lead to gun violence, (b) naïve anti-racist narratives that blame structural racism without explaining the causal mechanisms, and (c) control narratives that do not provide any additional context on CGV.

Chapter 2 presents the development and experimental results of a critical narrative on youth violence prevention using design-thinking methods. Compared to traditional youth behavior change narratives, the critical narrative seeks to promote protective behaviors by reframing gun carrying as playing into racist narratives and scaffolding community activism as an empowering path to fight back. I evaluate the effectiveness of the critical narrative compared to traditional youth violence prevention narratives among high school students in Chicago and Texas. Results suggest that critical narratives are a promising route to address racialized policy issues by

^{1.} Sometimes referred to as "urban," "street," or "inner city" gun violence, I use the term "community gun violence" to emphasize the largely social and neighborhood-based nature of this phenomenon [@Green2017]

empowering communities by influencing public policy support and scaffolding youth activism.

All materials, pre-registrations, and supplementary information noted in this dissertation are hosted on Research Box repositories. The repositories for Chapters 1 and 2 are available at

https://researchbox.org/1069&PEER_REVIEW_passcode=HIBXPN and

https://researchbox.org/1528&PEER_REVIEW_passcode=YYVZDR, respectively.

Chapter 1

Critical Narratives Undermine Punitive Bias Towards Community Gun Violence Policies

Introduction

My dissertation seeks to use critical narratives to disrupt the process in which how mainstream narratives reinforce psychological and structural processes that maintain racial inequity. The first chapter explores the impact of adopting critically informed narratives that run counter to conventional narratives when discussing racial inequalities, such as the issue of gun violence in poor communities of color. This introduction will describe the disadvantages of conventional narratives about societal problems, followed by the comparable advantages of critical narratives as defined in this present work, and end with an overview of the experimental study conditions and hypotheses in Chapter 1.

Conventional narratives about societal problems reinforce inequalities

Narratives organize what information is most salient to audiences, which shapes lay beliefs about how a problem came to be and what solutions are appropriate (Druckman, 2001; Iyengar, 1991; Kim, 2015; Sotirovic, 2003). American narratives about societal issues have a history of presenting information from a perspective that is highly individualized, blind to how racial contexts shape experiences and perpetuate harmful racial stereotypes (Barry et al., 2013; Braga & Brunson, 2015; Parham-Payne, 2014; Perez & Salter, 2019; Roberts & Rizzo, 2020; Salter et al., 2016). In the following section, I describe how these characteristics ignore information that is critical for understanding societal issues in a way that represents the reality of the problem space.

Colorblindness suppresses historically marginalized narratives

When trying to make sense of societal problems, the presence or lack of contextual knowledge influences how a person explains outcomes and whether those explanations map onto reality. Racially colorblind narratives avoid considering race as a legitimate factor when analyzing issues, even in the face of clear racial patterns (Apfelbaum et al., 2012; Bonilla-Silva, 2015; Dupree & Kraus, 2021). In particular, colorblind narratives miss information and themes that emerge from

historically marginalized perspectives, such as critical historical knowledge about America's history of racism (Bonam et al., 2019; Nelson et al., 2013). Colorblind narratives can thus misrepresent the reality of racism and enable self-serving motives that affect how people perceive current issues (Delgado & Stefancic, 2017; Kraus et al., 2019). For example, colorblindness and a lack of critical knowledge lead to overestimating racial progress because it affirms beliefs about living in a fair, post-racial society (Jost, 2019; Kraus et al., 2019; Onyeador et al., 2020). Moreover, when shown counter-evidence of continuing racial inequality, rather than correcting overestimations of racial equality, participants downplayed the extent of past inequality (Onyeador et al., 2020).

Individualizing societal issues biases attributions

The information included in narratives impacts how observers explain, or attribute, other people's behaviors. When inferring what causes an event, the information that is most salient is often interpreted as playing a larger role (Fiske et al., 1982). The accuracy of this process is vulnerable to cognitive shortcuts evolved to facilitate navigating an information-rich world (e.g., Cimpian & Salomon, 2014; Tetlock, 2000).

Generally, people underestimate the power of situations to influence behavior. Work on fundamental attribution error, for example, demonstrates that people are prone to interpret others' behaviors as more agentic and representative of one's character over external factors (L. Ross, 1977; L. D. Ross & Nisbett, 1991). Related research on correspondence bias shows that dispositional attribution biases can persist even when information about constraining external factors is available, unless observers are motivated to update their spontaneous inferences to account for situational pressures (Gawronski, 2004; Gilbert et al., 1995; Jones & Harris, 1967).

Over-individualized narrative frames about societal issues can inhibit how folks without direct experience understand the relevant causal factors, which then impact beliefs about appropriate solutions. Narrative frames influence how viewers form causal explanations by manipulating the salience of information about individual characteristics compared to societal themes (Iyengar,

1991; Sotirovic, 2003). For example, an episodic narrative that communicates information through individuals' personal stories leads more viewers to understand societal issues as problems caused by personal failings for which they should be held responsible. In contrast, thematic narratives communicate abstract concepts as they connect to behavior and prompt greater blame towards failures of societal structures. Indeed, individualistic narratives have been shown to increase dispositional causal attributions and decrease support for policy interventions across societal issues such as obesity (Barry et al., 2013), poverty (Hannah & Cafferty, 2006; Piff et al., 2020), policing (Bowleg et al., 2021), and racism (Pew Research Center, 2016; Rucker & Richeson, 2021b).

Stereotypes substitute information gaps

In a problem space stripped of context through colorblind, individualized narratives, people draw from personal experiences and pre-existing mental models to explain others' behavior. However, high rates of racial segregation in the U.S. increase the physical and psychological distance between groups' experiences (Massey, 1993; Rothstein, 2017; Salter & Adams, 2016; Steele & Sherman, 1999; Trope & Liberman, 2010). These differences in physical environments and lived experiences impact how a person can afford to make sense of the world and human behaviors (Steele & Sherman, 1999; Walton & Yeager, 2019). In this sense, someone with first-hand experience living through the consequences of societal problems can afford to call on more factors to understand related behaviors than someone who does not (Roberts & Rizzo, 2020; Salter & Adams, 2016; Steele & Sherman, 1999; Walton & Yeager, 2019).

For those who cannot afford such nuanced understandings, potential causal factors are limited to representations of the affected group seen in mainstream narratives. Reliance on mainstream representations of marginalized groups for accuracy, however, is not ideal. Whether delivered through entertainment or news reports, racial stereotypes are made salient when the public receives racially coded information (Banaji et al., 2021; Hurwitz & Peffley, 1997, 2005). Popular media promotes racial stereotypes that influence attitudes towards stigmatized groups and the

issues affecting them (Bjornstrom et al., 2010; Dixon & Linz, 2000; Gilens, 1996b; Hurwitz & Peffley, 1997, 2005; Oliver, 2003).

Conventional narratives perpetuate inequity and feed the cycle of violence

Building public support for effective policy solutions depends largely on people's attitudes about the causal nature of a social problem. (Brown-Iannuzzi et al., 2017; Dunbar, 2020; Haider-Markel & Joslyn, 2001; Parham-Payne, 2014; Wozniak, 2019). For example, individualistic attributions predict opposition to welfare policies, whereas societal attributions predict support for social service spending (Iyengar, 1991; Sotirovic, 2003). In contrast, societal blame yields sympathy that translates into a greater willingness to support the victims (Cuddy et al., 2008; Haider-Markel et al., 2018).

People generally approve of social support services and rehabilitative policies to reduce crime. However, people are more likely to prefer harsher punishments when the decision is in response to "Black crime" (Hetey & Eberhardt, 2014, 2018). This shift has been linked to how stereotype-consistent cues shape policy preferences towards disproportionately punishing Black men. Conclusions about how "deserving" a person is of correctional punishment or how "undeserving" they are of public assistance are an automatic response that is influenced by stereotypical beliefs of Black people as dangerous or lazy, respectively (Bridges & Steen, 1998; Brown-Iannuzzi et al., 2017; Gilens, 1996a, 1999).

When it comes to evaluating public policies that would primarily impact underserved communities of color, biased deservingness beliefs can impede constructive change by either increasing support for punitive actions against low-level crimes or decreasing support for social welfare, both of which are related to negative stereotypes about Black Americans (Green et al., 2006). The racial biases towards punitive support can be understood as a symptom of how mainstream narratives make stereotype-consistent information salient without including nuanced understandings of race. When left unchallenged, such lay beliefs are a psychological barrier to implementing policies intended to reduce racial disparities through structural change (Geronimus,

Critical narratives as an alternative approach

I argue that the problems of colorblindness, over-individualization, and racial stereotypes in mainstream narratives can be undermined by narratives that wisely deliver these critical components, even on a topic as controversial as racism and gun violence. *Critical narratives* counter the myth of a post-racial America and raise awareness about how societal structures perpetuate patterns of racial inequality in wealth, health, education, imprisonment, and other major life outcomes. Critical narratives are a type of counter-narrative in the sense that they counter assumptions of a post-racial society presented in convention narratives. The critical narrative information explains how structural oppression impacts the people's daily experiences based on race, which is inconsistent with views that society is fair and just.

This approach is grounded in critical social theories developed to empower scholars and the public to understand and disrupt norms that whitewash root causes of social inequities (Collins, 2019b; Crenshaw et al., 1995; Delgado & Stefancic, 2017; Freire, 1970). Critical Race Theory (hereafter CRT) is a seminal framework originated by legal scholars to interrogate how the social construct of race is imbued with power throughout fundamental societal institutions (Crenshaw et al., 1995; Delgado & Stefancic, 1992, 2017). Scholars and practitioners across education (Ladson-Billings, 1995; Lynn & Dixson, 2013; Solórzano & Yosso, 2002), psychology (Crossing et al., 2022; Diemer et al., 2016; Salter & Adams, 2013; Torre et al., 2012), public health (Graham et al., 2011), and medicine (Metzl et al., 2018; Metzl & Petty, 2017; Tsai et al., 2021) have since adopted critically conscious approaches that incorporate CRT principles and other themes related to challenging inequitable structures.

In the context of this paper, I operationalize critical narratives as an informational piece that: centers marginalized perspectives (a), recognizes structural racism as a root cause of the problem (b), and explain how structural racism causally impacts the problem (c).

Centering of marginalized perspectives to counter normative narratives.

When examining social policy issues, a practice of centering perspectives from historically marginalized groups affected by the issue can reveal pertinent themes and factors that could otherwise be washed away. Holistic analyses of the individual- and system-level factors surrounding a problem enable a richer understanding of behavior as it relates to external structure and norms (Bowleg et al., 2021; Collins, 2019a; Crenshaw et al., 2016; Geronimus, 2000; Gkiouleka et al., 2018). Critical narratives can begin to fill in the gaps by raising consciousness about the structural nature of racism and how it has significantly impacted mechanisms for full citizenship and socioeconomic mobility (Alexander, 2010; Bonilla-Silva, 1997; Crenshaw et al., 1995; Miller, 2022). This missing information facilitates policy approaches that look "upstream" to create preventative, sustainable, and effective solutions to problems that show patterns of systemic differences (Heath, 2020).

Counter-storytelling, a rhetorical tool of CRT, critiques colorblind narratives by presenting accounts from the lived experiences of marginalized groups, which often paints a fundamentally different picture of societal systems that are inconsistent with normative representations (Crenshaw et al., 1995). Perspectives from racially marginalized groups introduce critical information that is inconsistent with overly optimistic colorblind narratives about racial equality. By introducing new salient information about the relevant societal context, the counter-storytelling component of critical narratives can help override the prominence of stereotypes in public mental models.

Recognition of structural racism as a contributor to societal problems

The conventional narratives miss critical information about the root causes of societal problems, as many stem from structural inequities. In particular, individualized colorblind narratives neglect the wealth of interdisciplinary evidence illustrating the extent of racism embedding in American institutional structures and social fabric Williams & Collins (2001). Critical narratives enrich the potential for developing equitable and effective solutions because

they look upstream to address the underlying mechanisms that tilt the scales (Heath, 2020). Structural racism plays a role in how social policy issues came to be and why they often disproportionately affect minority groups (Alexander, 2010; Bailey et al., 2017; Bonilla-Silva, 1997; Lawrence et al., 2008; Massey, 1993; Sampson et al., 2002; Williams & Collins, 2001; Williams & Mohammed, 2013). However, most Americans understand racism as an individual quality that exists in a racially prejudiced person while underestimating racism in structures like laws and institutions (Banaji et al., 2021; Bonilla-Silva, 1997, 2003, 2015; Rucker, 2020; Rucker et al., 2020; Rucker & Richeson, 2021a; Rucker & Richeson, 2021b).

Explanation of how structural racism contributes to current issues

A critical narrative can expand mental models of racism by illuminating systemic racial patterns to identify and repair underlying structures that uphold discriminatory processes. To be effective, however, the narrative must also explain how causal mechanisms of racial oppression influence marginalized experiences and produce different group-level outcomes. Critical consciousness, sometimes called structural competency, is the capacity to identify and navigate the structures underlying social inequities in pursuit of equity-oriented goals (Diemer et al., 2016; Freire, 1970; Metzl et al., 2018; Metzl & Petty, 2017). For example, teaching "structural competency" to medical residents resulted in more effective patient care than the control group (Metzl et al., 2018; Metzl & Petty, 2017). In this context, learning how laws and institutions operated to marginalize groups afforded medical residents' greater contextual knowledge to better understand how patterns in socioeconomic circumstances relate to patients' health behaviors (e.g., inability to visit pharmacy outside of work hours or missing appointments because of unreliable public transportation). This consciousness about the causal history behind racial inequalities can help correct implicit biases from narrative structures and contents that neglect this critical context.

Applying critical narratives to community gun violence

Critical narratives can be used to understand complex phenomena, like how structural forces transmit (dis)advantage by shaping institutions, laws, and social norms. For this dissertation chapter, I created articles that provided information about gun violence in some poor communities of color and differed on key theoretical dimensions.

In exploring how people come to understand why gun violence is such a problem in some poor communities of color, I expect a critical narrative to undermine the colorblind, individualistic, and misrepresentations of Black Americans that bias attitudes and behaviors. The following section describes how I apply the above elements of critical narratives to CGV as a problem space.

Centers marginalized perspectives to counter normative narratives

Not only are conventional narratives not capturing the full story, but they are also missing evidence of how the traditional prescriptions for reducing violence in this context amplify underlying causes of CGV. Punitive models of crime deterrence use fear-based threats and incapacitation as primary mechanisms of violence reduction. These levers, however, are disproportionately used against marginalized communities to a devastating degree (Alexander, 2010; Massey, 1993, 2020; Rothstein, 2017; Wildeman & Wang, 2017). Over-policing and mass incarceration of poor neighborhoods of color destabilize family and community structures, which fosters patterns of violence (Alexander, 2010; Miller, 2022; National Research Council, 2014; Sampson et al., 2002; Smiley & Fakunle, 2016; Swisher & Shaw-Smith, 2015). Police presence is often seen as a threat to one's safety rather than protective service due to disproportionate arrests of people of color and accounts of racial discrimination (Futterman et al., 2016; Schutz, 2016; Wacquant, 2002).

Recognizes structural contributors to societal problems

There are significant situational constraints that directly and indirectly shape the racial disparities in gun homicides. Mainstream narratives often emphasize individual traits like mental illness or personal histories, which prompt support for solutions that prevent the most "at-risk" individuals from accessing guns (Gallup et al., 2019; Haider-Markel & Joslyn, 2001; Lu & Temple, 2019; McGinty et al., 2014). Individualized narratives about crime are particularly consequential for the group most at-risk of experiencing gun homicides. This group has been historically excluded from mainstream socioeconomic building opportunities and are subject to racial biases in how they are represented in popular media (Smiley & Fakunle, 2016).

A critical narrative highlights the significant situational and structural contributing factors to that directly and indirectly shape the problem space of CGV. For example, the extreme rates of gun violence in some Black communities are a symptom of historical inequities that restrict access to basic needs, civil rights, and paths to socioeconomic mobility (Alexander, 2010; Knopov et al., 2019). This information is considered critical because it communicates insights about root causes that are key to informing preventative, upstream solutions.

Explains how structural racism contributes to current issues

However, this critical information about structural racism can only be expected to counter inferences that rely on stereotypes if it explains why racism is a relevant factor in the first place. In the context of CGV, critical narratives can draw on scholarship that explains how overtly racist policies and practices that infringe on Black American's opportunities to get ahead, such as "The New Jim Crow: Mass Incarceration in the Age of Colorblindness" (Alexander, 2010), "The Case for Reparations" (Coates, 2014), and "The Color of Law" (Rothstein, 2017). For example, critical connections can be made by describing hidden political agendas behind the War on Drugs, which fueled the mass incarceration of Black men for minor drug crimes despite being less likely than Whites to use or sell drugs. Racial discrimination carried out through housing and policing can be described as two major factors that restrict the ability of Black Americans to pursue stable

housing and legal employment, which increases pressure to seek income through illegal means and gun carrying for protection.

Provides an identity-safe space to deliver critical knowledge

One glaring challenge to this expectation is that gun violence, policing, and racism are high-profile topics that trigger sharp identity-based divides (Jost, 2017; Pew Research Center, 2016, 2019; Unzueta & Lowery, 2008). Moreover, current U.S. politics are extremely divisive, with much political information being communicated via echo chambers that pander to ingroup ideals (Hetherington & Rudolph, 2015; Pew Research Center, 2014). Desires to signal that one is "anti-racist," for example, have risen since the racial uprisings of 2020. Although normalizing anti-racism is valuable for advancing equitable policies, doing so naively often obscures the structural construal of racism that is foundational in critical narratives. As a result, politicized terms like "structural racism" and "critical race theory" can be easily misconstrued because they are used as naive buzzwords to gain favor without needing to unpack the concept.

Values-alignment is a behavior change strategy that frames prescriptive messages as consistent with salient, existing values of the intended audience (Bryan et al., 2016; Bryan et al., 2019). A narrative that naively invokes anti-racist language to deliver critical information about CGV may prompt strong reactance, raising the likelihood of conservatives rejecting the content altogether. I used a values-alignment strategy to mitigate reactance associated with political and racial identities by presenting information in a way that minimizes language that could signal goals that are inconsistent with salient political values. A values-alignment approach does not attempt persuasion by convincing people to change their pre-existing values as identity-threats impede efforts to change racially charged attitudes, such as perceptions of inequality (e.g., Onyeador et al., 2020).

Although one might expect critical narratives to increase critical consciousness, the present narratives discuss controversial topics in the context of a societal problem that does not directly impact much of the population. I would expect greater identity-based reactance from critical

narratives that expose inequities in a context that could potentially implicate participants' identities and positions of privilege. For these reasons, I expect to critical narrative to shift policy preferences regardless of political orientation or level of critical consciousness.

I expect applying this approach to critical narratives on controversial topics will shift attitudes regardless of political orientation and the values and norms that are closely associated, like egalitarianism and perceptions of inequality. Personal freedom is a traditional American value that appeals to conservative parties, except when presented through narratives from opposing liberal parties. Introducing a similar yet competing identity into a problem space can raise identity threats and motivations to affirm values that distinguish one's personal identity from the opposing party's identity. In this way, the critical narratives leverage the mental model of egalitarianism as a shared American value rather than a distinguishing political value. Taken together, I expect a critical narrative that poses a problem and appeals to shared intergroup values can deliver controversial information without the associated sociopolitical baggage hanging onto the normative mental model.

General Paradigm

A series of experimental studies test whether a critical narrative about the causal connection between CGV and racism influences support for punitive versus restorative approaches to reducing violence, compared to (a) individualized narratives that explain how individual deficiencies in socioemotional skills lead to gun violence, (b) naïve anti-racist narratives that blame structural racism without explaining the causal mechanisms, and (c) control narratives that do not provide any additional context on CGV.

Manipulations

Control condition. All narratives begin by comparing the national conversations on mass shootings to the daily gun violence experienced in some poor neighborhoods of color. This

introduction establishes a counter-space to the dominant narratives by identifying a related yet overlooked concern. The control condition narratives point out the racial pattern of CGV but do not provide context about the affected group's lived experiences (a), recognize structural racism as a contributing factor to CGV (b), or explain its causal impact (c). This condition establishes a reference point that captures spontaneous beliefs about gun violence without exposure theoretically relevant factors.

Critical narrative condition. The critical narratives include the same introduction, adds context about the affected group's experiences, and recognizes how structural racism fostered conditions that create risks for gun violence. Importantly, the critical narratives also provide causal explanations of how racism yields unequal group outcomes through external systems that transmit disadvantage. The critical narratives draws inspiration from "The New Jim Crow: Mass Incarceration in the Age of Colorblindness" (Alexander, 2010) and "The Case for Reparations" (Coates, 2014) to describe overtly racist policies and practices that infringe on a group's freedom to pursue equal opportunities for socioeconomic mobility.

Individual narrative condition. Like the critical condition, the individual condition stimuli also center the experiences of the marginalized group. However, it does not recognize structural racism as a causal factor, nor does it explain how structural racism raised the risk of violence by shaping the affected groups' environment and circumstances. The individual narrative's telling of the affected group's experience only explains how individual-level factors contribute to violence. Instead, it presents a thematic narrative about the patterns of CGV along with information about situational pressures individuals face. The individualized narratives do not, however, label or explain the structures underlying individuals' surrounding context. It instead emphasizes the impact of dispositional traits like self-control and explains how deficiencies put individuals at-risk of experiencing gun violence.

Navïve anti-racist narrative condition. Similar to the critical narratives, the naïve narratives raise awareness of marginalized groups' experiences and declares structural racism as a contributing factor to social problems like gun violence. These naïve narratives explicitly call out racism as a root cause of violence, but they do not promote an understanding of why or how. The naïve anti-racist narratives describe how leaders are increasingly condemning structural racism and includes politicized buzzwords that signal egalitarian values. As liberal parties increasingly center this position in their platform, those who identify with liberal values may be motivated to call out structural racism as a cause of injustice to signal their commitment to shared in-group values. Since recognizing the existence of structural racism is a controversial claim, more information is needed to persuade audiences who perceive it is inconsistent with their current beliefs and values. Comparison with this naïve condition is expected to demonstrate the need to explain critical concepts through a bottom-up, counter-cultural perspective.

Table 1.1. Main Hypotheses Across Studies 1 to 4, Chapter 1

- H1a. The critical narrative will decrease support for punitive policy responses to community gun violence.
- H1b. Political ideology will not moderate the critical narrative's negative effect on punitive support.
- *H2c.* The critical narrative group will show decreased punitive support after a 1-week period.
- **H2a.** The critical narrative will increase support for restorative policy responses to community gun violence.
- *H2b.* Political ideology will not moderate the critical narrative's positive effect restorative support.
- *H2c.* The critical narrative group will show increased restorative support after a 1-week period.
- *H3.* The treatment will reduce support for punitive policy approaches in a violence prevention budget allocation task.
- **H4.** The critical narrative will increase willingness to share the gun violence narrative on social media.
- **H5.** The critical narrative will increase gun violence attributions to structural factors over dispositional factors.
- **H6a.** Structural attributions for gun violence will partially mediate the critical narrative's negative effect on punitive support.
- **H6b.** Structural attributions for gun violence will partially mediate the critical narrative's positive effect on restorative support.

Analytic strategy

Across the studies in Chapter 1, I ran multiple linear regression models to examine the impact of the critical narrative on the dependent variables of interest. All models included political orientation, racial and ethnic identity, gender, age, adjusted income, and level of education as covariates. For consistency, I based the model terms representing participants' sociodemographic groups on the categorization used by the survey firm contracted to run the nationally representative probability sample presented in Study 4.

Political orientation was measured on a scale from 1 (*extremely liberal*) to 7 (*extremely conservative*) in Studies 1 through 3. In Study 4, political orientation is measured on a scale from 1 (*very liberal*) to 5 (*very conservative*). White, Black, Hispanic, or "other" were included as binary variables to represent racial and ethnic identity in the models. Education was modeled using binary variables representing whether a participant did not have a college degree, had a college degree, or had a graduate or professional degree. The measure of adjusted income was calculated by dividing participants' annual income by the square root of their household size.

I then ran linear contrasts of a between-subjects Type III one-way ANCOVA model to compare the effect of the critical narrative to other conditions included in each study design. For moderation analyses, I ran a two-way ANCOVA with an interaction between conditions (1 = critical, 2 = control, 3 = individual, 4 = na"ive) by political orientation. For the post-hoc analyses of these interaction models, I used a 3-scale factorial measure of political orientation (1 = liberal, 2 = moderate, 3 = conservative).

Study 1. A critical narrative reduces punitive policy preferences

Study 1 investigates whether reading information about the causal contributors to CGV can shift public policy preferences and attributions for the racial patterns in CGV. The study is a 3 x 1 between-subjects design, in which participants are randomly assigned to one of three conditions: critical, individual, and control. I expected that the information delivered through the critical

narrative would reduce support for punitive policies and increase support for restorative policies. I then conducted moderation analyses to examine whether information about this controversial partisan topic would impact people with political identities that are traditionally supportive or opposed to enacting equitable policy changes.

Methods

Participants

A total of 742 online participants were recruited to complete a 15-minute survey (M = 14.92, SD = 8.08) for \$1.50 on Amazon Mechanical Turk in Fall 2019. There were no significant differences in survey duration between conditions (F(2,739) = 0.28, p = .753). Adults ages 18 and over were eligible to participate in the study and participants were not excluded based on gender, race/ethnicity, or any other sociodemographic criteria. The final sample was reduced to 602 after excluding participants who failed three rounds of reading comprehension questions about the narrative stimuli. The patterns of results reported below are consistent between both the full and reduced sample (see Appendix B).

Procedure

The survey randomized participants to read one of three variations of an ostensibly real Wall Street Journal article about community gun violence in poor neighborhoods of color. The key differences were that the critical narrative described how structural racism contributes to community gun violence, while the individualized narrative instead focuses on how individual differences in self-control contribute to violence.

The control provided no additional information. Participants in the control condition were asked to participate in a study about the rise of vaping among young people. The survey then invited participants to complete a separate study about gun violence. The participants were shown a brief description about the racial patterns in community gun violence. This description matched

the introduction used in the critical and individual narrative.

All news articles ended with three manipulation check questions that asked participants to recall details about the causal claims made in the article. Participants who answered at least one question incorrectly were redirected to the news article page and asked to review, and then tried answering again. After three failed attempts, the survey allowed participants to continue the survey, but their data were excluded from analyses.

The survey then displayed, "Here are some programs and proposals being discussed in the U.S. today," and asked participants to please indicate whether they oppose or favor each one. The policy items were each presented on a single page in a randomized order. Participants then answered exploratory survey measures and sociodemographic questions. The survey then displayed a debriefing statement about the nature of the study and its use of fake news articles. The statement provided links to sources and explained that the claims made in the articles were supported by credible news outlets and peer-reviewed journal articles.

Materials

Critical narrative. The critical news article titled "Chicago's Gun Violence is Deeply Rooted in Racial Segregation and Mass Incarceration" presented evidence from scholars and public health experts about how a history of racism fostered societal conditions that led to high rates of gun violence in some Black and Latino communities. The article describes how U.S. banks officiated racial discrimination in lending practices and housing regulations, which created pockets of concentrated poverty that made it nearly impossible for families to escape. The author provides evidence of hidden agendas behind a discriminatory shift in policing practices and provides statistical evidence of racial discrimination in the criminal justice system. The critical article ends with a gun violence expert advocating for policies that target the physical, economic, or social structures in neighborhoods with gun violence to repair the damage done by racism. The recommendations included affordable housing regulation, local business construction, public education, and better community-police relations.

Individual narrative. The individualized article "Chicago's Gun Violence is Deeply Rooted in Self-Control Issues" describes this issue with a focus on how individual traits raise the risk of experiencing gun violence. It argues that the above-average rates of gun violence in poor, Black neighborhoods are due to young residents developing a disposition to react impulsively and aggressively towards others. The article ends by advocating for socioemotional development programs that teach kids how to resolve conflicts peacefully. The individual article ends by advocating for socioemotional development programs that teach kids how to peacefully resolve conflicts, improve decision-making skills, and internalize values of self-determination and integrity.

Control narrative. Participants in the control condition were told that they would be participating in two separate studies. The "first study" presented the control article on vaping and manipulation check questions. After passing through the manipulation checks, the survey asked participants about their vaping habits and thanked them for completing the first study. The survey then directed participants to a second survey on gun violence in poor communities of color. The survey page used the same first paragraph as the critical and individual conditions to introduce the problem of gun violence in poor communities of color. The control participants followed the same survey path as the critical and individual conditions.

Measures

Eight public policy proposals adapted from public opinion polls from the Pew Research Center and Gallup were used to measure support for punitive and restorative policy approaches on a scale from 1 ($strongly\ oppose$) to 4 ($strongly\ favor$). Composite scores were created for each participant by averaging their responses to the items within the respective categories of punitive support (a = 0.81) and restorative support (a = 0.66).

Four of the items described punitive policies that proposed greater punishments for criminals.

The punitive items included items: *more police on the streets, longer jail terms for those convicted of violent crimes, more prisons and fewer opportunities for parole,* and *increase*

criminal penalties for non-violent crimes. The other four items described restorative policies that proposed greater resources to support community members. The restorative items included: more community programs for young people, job programs for people in the inner-cities, more federal assistance to the poor, and remove criminal-history questions from employment applications.

Results

Punitive support

Support for punitive policies was lower in the critical condition (M = 2.20, SD = 0.70) than the control condition (M = 2.53, SD = 0.72) and the individual condition (M = 2.49, SD = 0.73). A one-way ANCOVA controlling for sociodemographic characteristics test showed that the critical narrative's negative effect on punitive support was statistically significant (t(590) = -4.97, p < .001; F(2,590) = 12.48, p < .001). This main effect of condition was also not significantly moderated by political orientation (F(2,588) = 0.10, p = .908). The significance patterns for the main effect on punitive support and the interaction model were maintained when including participants who did not pass the survey checks(Condition: t(730) = -4.86, p < .001; Condition x Political: F(2,728) = 0.87, p = .419).

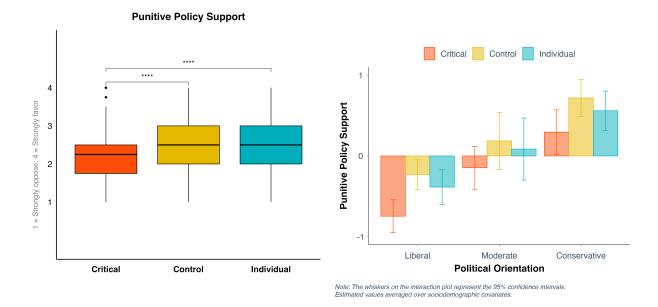


Figure 1.1. Punitive Policy Support by Condition and Political Orientation in Study 1

Table 1.2. Punitive Policy Support by Condition and Political Orientation in Study 1

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	63.83	1	63.83	87.25	<.001		
Condition	5.31	2	2.65	3.63	.027	.01	[.00, .03]
Political Orientation	38.08	1	38.08	52.05	<.001	.08	[.04, .13]
Female	5.94	1	5.94	8.12	.005	.01	[.00, .04]
Racial/ethnic Identity	1.16	3	0.39	0.53	.664	.00	[.00, .01]
Age	1.11	1	1.11	1.51	.219	.00	[.00, .02]
Education	0.67	2	0.34	0.46	.632	.00	[.00, .01]
Adj. Income	0.11	1	0.11	0.14	.704	.00	[.00, .01]
Condition x Political	0.14	2	0.07	0.10	.908	.00	[.00, .00]
Error	430.22	588	0.73				

Note. SS = Sum of squares. df = degrees of freedom. MS = mean square. CI indicates the 95% confidence interval for $\eta^2_{partial}$.

Restorative support

Participants who read the critical narrative also reported the greatest level of support for restorative policies (M = 3.30, SD = 0.55;t(590) = 3.57, p < .001; F(2,590) = 7.33, p = .001). This level of support was significantly higher than the levels reported in the control condition (M = 3.12, SD = 0.55) and in the individual condition (M = 3.06, SD = 0.53). The positive effect of the critical narrative on restorative support was not moderated by political orientation (F(2,588) = 0.24, p = .790). When including the participants who failed the survey checks, I found the same pattern of results for the main effect of condition (F(2,730) = 11.89, p < .001) and test of moderation (F(2,728) = 0.34, p = .714).

Table 1.3. Restorative Policy Support by Condition and Political Orientation in Study 1

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	5.08	1	5.08	7.19	.008		
Condition	10.09	2	5.04	7.14	.001	.02	[.00, .05]
Political Orientation	51.86	1	51.86	73.41	<.001	.11	[.07, .16]
Female	0.80	1	0.80	1.13	.287	.00	[.00, .02]
Racial/ethnicy Identity	1.73	3	0.58	0.81	.486	.00	[.00, .02]
Age	0.06	1	0.06	0.08	.779	.00	[.00, .01]
Education	4.75	2	2.38	3.36	.035	.01	[.00, .03]
Adj. Income	0.40	1	0.40	0.57	.452	.00	[.00, .01]
Condition x Political	0.33	2	0.17	0.24	.790	.00	[.00, .01]
Error	415.37	588	0.71				

Note. SS = Sum of squares. df = degrees of freedom. MS = mean square. CI indicates the 95% confidence interval for $\eta_{partial}^2$.

Discussion

This study explored how a counternarrative could influence policy preferences by providing critical knowledge about the patterns of systemic racial disadvantages. The results support the

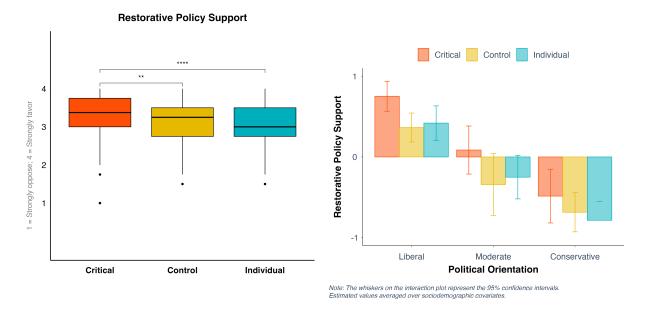


Figure 1.2. Restorative Policy Support by Condition in and Political Orientation in Study 1

study's primary hypotheses that the critical narrative reduces punitive policy support (H1) and increases restorative policy support (H2), compared to individualized narratives that dominate mainstream media as well as narratives that do not include additional context beyond reporting that there are racial patterns in high rates of community gun violence. Despite the strong, positive association between conservative values and punitive policies, the critical narrative effects on policy support is not a significant function of political orientation (H1a & H2a). Additionally, exploratory analyses showed there not significant difference in punitive support between participants in the individual condition (M = 2.49, SD = 0.73; t(584) = 1.95, p = .051) and the control condition (M = 2.53, SD = 0.72). The lack of difference between the control and individual conditions in policy support and stereotype agreement supports my assumption that the individualized narrative is more representative of the normative standard than the critical narrative.

A key limitation of this study is that the critical narrative discusses racism in policing and restorative policies. These topics are not included in the individual narrative. Additionally, the policy support measures asked about participants' general support of the proposed policy, rather

than their support the policies as a response to community gun violence. Although I am interested in general policy support, the working theoretical model is focused on how the public interprets and responds to community gun violence because it is a social policy issues that disproportionately affects a stigmatized group. The upcoming studies narrow the focus to policy responses to gun violence and include other design changes to address these issues.

Study 2. Identity-safe explanations of racialized violence as a bipartisan approach to reduce punitive preferences

More liberal-leaning public figures are increasingly emphasizing the need to address structural racism but fail to explain what that means and why it is relevant. On the other side of the political spectrum, conservative public figures have pushed forward systemic bans on teaching about structural racism and other topics related to the liberation of historically marginalized groups. That is, both sides of the U.S. highly partisan political platforms use terms such as critical race theory, diversity, and anti-racism as vague umbrella terms in mainstream media outlets with a lack accurate information. Whether the intentions of the public figures are in support or opposition of pursuing racial equity, the poor communication practices from both sides end up obscuring information, which undermines the potential for racial progress by raising critical consciousness of how structural oppression connected to current policy issues.

In Study 2, I test whether providing the causal explanation of how structural racism impacts current gun violence is a key to the main effects on policy preferences found in Study 1 by comparing the critical condition to a naïve anti-racist condition. Compared to a critical narrative, naïve narratives (A) describe marginalized group experiences and (B) proclaim the importance of being against structural racism but fails to (C) explain the critical history behind it. I also designed Study 2 to rule out the possibility that the conditional differences found in Study 1 are due to the critical narrative including recommendations for restorative policies, while the individual and control conditions did not. This study is a two-group randomized, between-subject

experiment that presents varying narratives about CGV that conclude with the same set of policy recommendations.

Methods

I recruited 1,043 participants through Dynata, an online survey panel firm, to complete a 15-minute research study about information evaluation (M = 23.36, SD = 59.27). The survey firm collects data from a pre-screened panel of participants, which allowed me to drop the comprehension check questions from the survey. After consenting to participate in a study about information evaluation, the survey first notified participants that they would be asked to read an informative article, briefly summarize the article, and answer multiple choice questions about their honest opinions. The survey randomized participants only after participants agreed and continued to the next page. Participants were then asked to read a news article that was assigned for the critical or naïve condition.

After the reading, the survey asked participants describe the main points of the article in three to five sentences. This page also included a list of quotes from the article that represented the major claims of each article. The survey then asked participants to complete the same questions used to measure support for punitive and restorative policies as in Study 1 followed by a set of exploratory measures.

Critical narrative. I revised the critical narrative used in Study 1 to end with new paragraphs that contrast recommendations for both punitive and restorative violence reduction approaches. In the penultimate paragraph, the author quotes police experts who recommend investing in policing and prisons to reduce crime. Specific recommendations include investments in surveillance technology, more patrol officers, and equipment. The final paragraph counters this perspective with policy experts who say that policing is not the root cause of violence and then recommends investing in community infrastructure and support services, such as public

education, youth programs, and affordable housing.

Naïve anti-racist narrative. This narrative was designed to satisfy liberals' social desirability to be "against racism" while provoking reactance from conservatives. The naïve narrative blames gun violence on systemic racism but does not explain how historical patterns of systemic racism contributed to gun violence at any point. I substituted the causal information delivered in the critical narrative with statistics such as the specific number of homicides per year. The naïve narrative then reports that the nature of gun violence has changed over the years, but our policies and approaches have not. The article then explains how the culture surrounding urban gun violence has changed over the years. Using language from news outlets, the article describes the culture of "Chicago's many informal, neighborhood groups, or cliques, of young,

African-American men follow a deadly code: perceived slights and past slayings of friends by rivals must be avenged through the barrel of a gun...[and] live in their own, isolated culture that glorifies gun violence and warps how they see themselves as black men," (Science News, 2019).

Results

Punitive support

Reading the critical narrative was associated with less support for punitive policies (M = 4.16, SD = 1.43; F(1,1,032) = 46.25, p < .001) than those who read the naïve narrative (M = 4.74, SD = 1.38). The positive association between the critical condition and punitive policy support was not moderated by political orientation (F(1,1,031) = 1.53, p = .216).

Restorative support

Participants who read the critical narrative also reported greater support for restorative policies (M = 4.99, SD = 1.25; F(1,1,031) = 0.17, p = .679) than those who read the naïve narrative (M = 4.84, SD = 1.17). This positive association between the critical condition and restorative policy support was also not moderated by political orientation (F(1,1,031) = 0.17, p = .679).

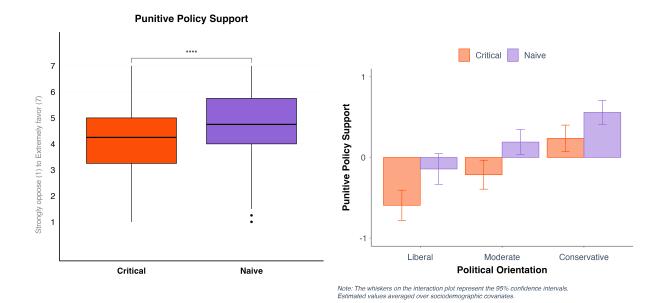


Figure 1.3. Punitive Policy Support by Condition in Study 2

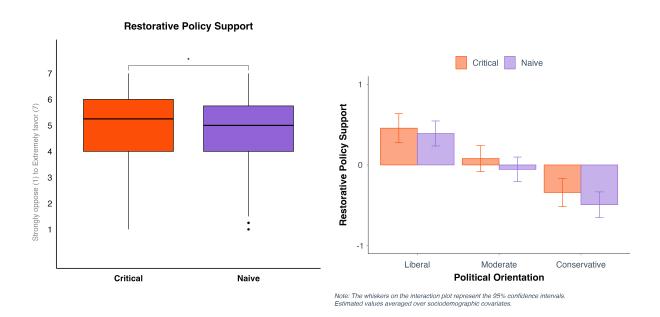


Figure 1.4. Restorative Policy Support by Condition and Political Orientation in Study 2

Discussion

The results of Study 2 revealed that, compared to the explicitly anti-racist narrative, the critical narrative reduced support for punitive policies to address gun violence and increased support for restorative policies. The critical effect on restorative support was weaker than punitive support. The results suggest that naïve attempts to signal anti-racist values by just blaming problems on structural racism is insufficient to shift attitudes across the political spectrum, merely calling out systemic racism is not sufficient to replicate the main effects on punitive policy support and restorative policy support.

Study 3. Structural attributions for gun violence drive critical reduction of punitive policy preferences

Calls for adopting restorative approaches have increasingly emphasized the need to divest from policing to minimize harm against communities of color and criticized gun violence reduction plans for prioritizing police investments as the primary response to reducing gun violence (The White House, 2022). Although there is wide general support for restorative approaches, some policy experts stress that policing and imprisonment are still necessary levers for violence reduction, arguing that it incapacitates repeat offenders and reduces the likelihood of sparking a cycle of violent retribution from vigilante justice (Cook & Ludwig, 2019). Causal attributions about how a problem came to be play a large role in policy preferences. For example, lay beliefs about the nature of high rates of gun violence in Black communities, for example, may align with implicit anti-Black stereotypes, which can in turn affect which violence prevention strategies gain support (e.g., Hetey & Eberhardt, 2014, 2018).

To better understand how people prioritize punitive versus restorative policies, I ran a 4 x 1 between-subjects study (n = 1,500) that compared the impact of reading a policy memo about "inner-city gun violence" through a critical narrative, individualized narrative, a naïve anti-racist narrative, and a control. Study 3 tests how critical narratives impact policy preferences when

placed in a zero-sum budget allocation task about reducing CGV.

Study 3 also further explores what is driving the conditional effect on policy support by examining causal attributions that do not invoke racial stereotypes. Study 3 tests whether a critical narrative on gun violence impacts policy preferences by changing whether readers attribute the cause of urban gun violence to dispositional factors (e.g., lack of work ethic, poor values) versus structural societal factors (e.g., fewer job opportunities and underfunded schools). Lastly, this study explores whether the critical narrative may impact behaviors by measuring participants' willingness to share their assigned narrative on social media and their engagement with an online petition in support of a real, community-led campaign for restorative violence prevention.

Methods

Participants

I recruited 1,500 participants on Prolific to complete a 15-minute research study (M = 18.31, SD = 10.55) on Prolific. The sample was 48% female, 77% White, 9% Black, 9% Latiné, 9% Asian, 1% Middle Eastern, and 2% of Native or Indigenous descent, with a median adjusted household income of \$37,527.77 (M = 43880.86, SD = 27477.80).

Materials

The manipulations for Study 3 were presented as policy memos from the University of Chicago Harris School of Public Policy. The subject line read: "Gun Violence in America's Poor Neighborhoods of Color" and included the same fake author's name used in previous manipulations.

Control narrative. The control memo only includes the introductory and closing paragraphs matched across conditions. The introductory paragraph explicitly sidesteps the dominant topics discussed concerning gun violence (i.e., gun control and mass shootings) to introduce the problem of gun violence in poor neighborhoods of color in major cities. The closing

paragraphs present two policy approaches for reducing gun violence: a punitive approach (e.g., increased law enforcement, policing technology, harsher punishments) and a restorative approach (e.g., affordable housing regulations, funding public education, and local businesses).

Critical narrative. After the introductory paragraph, the critical memo questions why there is a racial pattern in gun homicides and what can be done about it. It then explains how historical patterns of systemic racism contributed to this problem. This content of the present critical narrative differs slightly from the past iterations. I revised the paragraph discussing how policing targeted black communities for drug-related offenses to avoid triggering threats to conservative, white identities.

Individual narrative. The policy memo associated with the individual condition was adapted from the news article stimuli used in Study 1. The memo content describes the "psychological roots" of gun violence and provides a social analysis about this problem, in a style similar to the critical policy memo. The memo included quotes about how young boys living in violent neighborhoods are socialized to "look tough and act fast" as a defensive mechanism. The memo focuses on the individual-level behavioral risk factors of youth gun violence without explaining the structural contributors to gun violence.

Naïve anti-racist narrative. The naïve memo amplifies the anti-racist tone of the naïve article used in Study 2 and continues to leave out explanations of structural racism. This narrative was designed to prompt reactance against equity-oriented information by heavily signaling liberal values through the rise in "anti-racist" declarations. The naïve memo follows the introduction with a paragraph citing how experts have identified systemic racism as a cause of racial inequities, including gun homicides. It includes quotes calling for legislators to "acknowledge the root causes of racial inequity... [and address] racist policies that have wreaked havoc on our Black and Latinx communities" (Chicago Mayoral Press Release, 2021).

It also describes a growing consensus among officials, institutions, and professional organizations that have called for actions "to dismantle systemic racism, racial injustice, and police brutality" (AMA, 2020). The article includes a statement that invokes the importance of diversity, equity, and inclusion to properly understand gun violence" to amplify the anti-racist rhetoric (Everytown, 2021). Rather than include filler content that could introduce potential confounds, I did not attempt to match the length of the critical narrative.

After reading their respective memos, the survey asked participants to summarize the policy memo in their own words and presented bullet points of key points from the reading for reference. This open-ended question was used as an attention and manipulation check. No participants were excluded based on their summaries. After summarizing, they answered a series of survey questions. After answering the main survey questions described below, participants answered sociodemographic questions, were debriefed, and compensated through Prolific.

Measures

Policy support. I asked participants to rate the extent to which they oppose or favor policies on a scale from 1 (*strongly oppose*) to 7 (*strongly favor*). Half of the items were punitive, and the other half were restorative. Composite scores were created for each participant by averaging their responses to the items within the respective punitive and restorative policy categories. The punitive items included items: more police on the street to arrest criminals, longer prison sentences and fewer opportunities for parole, an increase in the severity of criminal penalties and fines, invest in technology to identify and target criminals, investment in police-community programs to increase crime tips, and seize property from suspected gang members (a = 0.91). The restorative items included: more afterschool programs to keep at-risk youth out of trouble, more mental health services and socioemotional support programs, more economic development programs to create jobs, invest in community-led peacekeeping organizations, greater financial investment to revitalize poor neighborhoods, and more affordable housing options (a = 0.86).

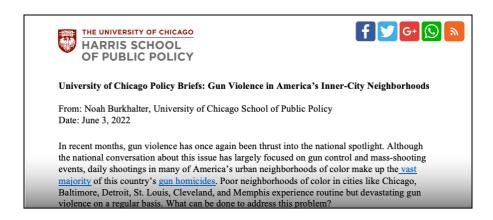


Figure 1.5. *Image of the willingness to share measure presented to participants in Study 3*

Budget allocation task. I asked participants to allocate a percentage of a budget across two proposals: "Fund community-led programs to revitalize neighborhoods affected by gun violence by investing in jobs, affordable housing, mental health services, education, and crisis response teams," and "Fund law enforcement programs such as officer training, gang intelligence units, and police patrols to get more violent criminals off of the streets in neighborhoods affected by gun violence." The presentation order of the options was counterbalanced.

Willingness to share policy memo. Participants saw a screenshot of the policy memo with social media icons and the question, "If you had the opportunity, how likely would you be to share this memo with your friends?" They responded on a scale from 1 (*extremely unlikely*) to 7 (*extremely likely*).

Causal attributions for urban gun violence. Participants were asked to rate the importance of various factors in explaining gun violence on a scale from 1 (*not at all an important factor*) to 5 (*an extremely important factor*). The list included six dispositional causes relating to personal character and invoked essentialism, such as "some people have a criminal nature" and "some people are just more aggressive" (a = 0.94). These dispositional traits are consistent with anti-Black stereotypes that stigmatize this group as having individual deficiencies such as poor parenting, low moral character, and cultures that glorify violence.

The structural factors instead pointed to deficiencies in societal institutions. This included recognition of structural racism, such as "a history of racial discrimination in policymaking," "less access to good quality schools," and "damage to families from mass incarceration." I also added two commonly debated factors about gun ownership to obscure participant inferences about the study design: "a lack of knowledge about gun safety" and "weak gun control laws" (a = 0.77). These items were not included in the composite.

Results and Discussion

Punitive support

The critical narrative significantly decreased support for punitive policies (M = 3.85, SD = 1.58; t(1481) = -5.02, p < .001) compared to the control narrative (M = 4.08, SD = 1.67), the individual narrative (M = 3.85, SD = 1.58), and the naïve narrative (M = 4.06, SD = 1.66). As in Studies 1 and 2, political orientation did not moderate the effect on punitive support (F(3,1,478) = 0.82, p = .482).

Table 1.4. Post-hoc Comparisons of Punitive Policy Support by Condition in Study 3

Contrast	Est.	SE	df	t	p
Critical - Control	-0.300	0.060	1481	-5.017	0.000
Critical - Individual	-0.198	0.061	1481	-3.266	0.003
Critical - Naive	-0.269	0.060	1481	-4.451	0.000

Restorative support

For restorative policy support, results show that the critical narrative increased support for restorative policies (M = 6.19, SD = 0.88; t(1481) = 2.52, p = .012), compared to those who read the control narrative (M = 6.00, SD = 0.97) and the individual narrative (M = 6.07, SD = 0.99). Restorative support in the critical narrative condition was greater than the naïve condition but the difference was not significant (M = 6.05, SD = 0.95). The positive association between the critical

condition and restorative policy support was not moderated by political orientation (F(3,1,478) = 1.03, p = .380).

Table 1.5. Post-hoc Comparisons of Restorative Policy Support by Condition in Study 3

Contrast	Est.	SE	df	t	p
Critical - Control	0.184	0.073	1481	0.040	0.327
Critical - Individual	0.158	0.074	1481	0.012	0.303
Critical - Naive	0.100	0.074	1481	-0.045	0.245

Budget allocation task

Participants in the critical condition were the least likely to allocate funds to the police budget versus the community investment budget (M = 26.56, SD = 22.08; F(3,1,477) = 5.78, p = .001). Results showed a significant decrease in the percentage of budget that was allocated to policing for those in the critical condition than the naïve (M = 29.54, SD = 23.97, individual (M = 28.13, SD = 21.99, and control conditions (M = 32.73, SD = 24.89). This main effect was not moderated by political orientation in the critical condition (F(3,1,478) = 1.21, p = .305).

Willingness to share

In addition to shifting personal policy preferences, the critical narrative also significantly increased participants' willingness to the policy memo with friends (M = 4.78, SD = 1.78; F(3,1,477) = 14.48, p < .001) compared to all other conditions. Participants reported being the least likely to share the control narrative (M = 3.91, SD = 1.91), followed by the naïve narrative (M = 3.99, SD = 1.96), and the individual narrative (M = 4.15, SD = 2.00). Unlike policy support, the critical narrative effect on willingness to share the memo was significantly moderated by political orientation (F(3,1,474) = 16.72, p < .001). The increased willingness of liberal and politically moderate participants to share the critical narrative more than the other narratives is a major driver of this interaction. In contrast, conservative participants reported being least likely to

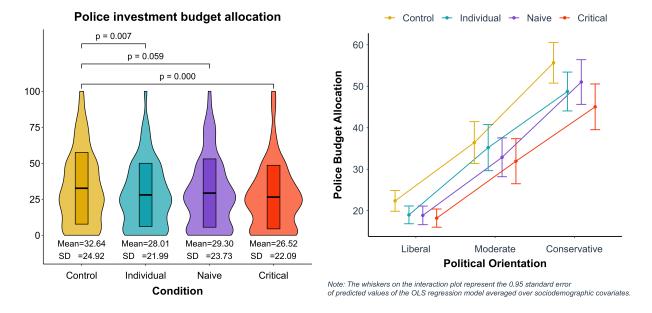
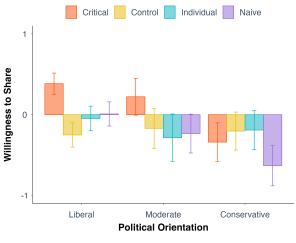


Figure 1.6. Preferences for investing in policing versus communities in a zero-sum violence prevention budget allocation task by condition and political orientation.

share the naïve narrative.

Table 1.6. Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation in Study 3

Contrasts	Est.	SE	df	t	p
Political Liberals					
Critical - Control	1.250	0.176	1470	7.091	0.000
Critical - Individual	0.847	0.175	1470	4.830	0.000
Critical - Naive	0.768	0.180	1470	4.262	0.000
Political Moderates					
Critical - Control	0.759	0.314	1470	2.418	0.042
Critical - Individual	0.997	0.334	1470	2.988	0.008
Critical - Naive	0.869	0.302	1470	2.883	0.011
Political Conservativ	es				
Critical - Control	-0.278	0.291	1470	-0.954	0.654
Critical - Individual	-0.312	0.300	1470	-1.041	0.592
Critical - Naive	0.577	0.298	1470	1.937	0.131



Note: The whiskers on the interaction plot represent the 95% confidence intervals. Estimated values averaged over sociodemographic covariates.

Figure 1.7. Plots of Support for Restorative Policies by Condition and Political Orientation in Study 3

Causal attributions

Those who read the critical narrative are more likely to attribute the causes of community violence to more structural causes (M = 4.14, SD = 0.88) versus dispositional causes (M = 2.57, SD = 1.06). I combined the structural and dispositional subscales to create one measure for attributions with the dispositional subscale reversed (a = 0.94). This composite measure of causal attributions to structural causes was significantly lower in the critical narrative condition (; F(3,1,477) = 11.14, p < .001) than in the control (M = 3.53, SD = 0.88) and individual condition (M = 3.56, SD = 0.82). The attributions were not significantly different between the critical condition and the naive condition (M = 3.60, SD = 0.89).

Table 1.7. Post-hoc Comparisons of Attributions by Condition in Study 3

Contrast	Est.	SE	df	CI Low	CI High	t	p
Critical - Control Critical - Individual Critical - Naive	0.185		1477	0.117 0.080 0.000	0.291	4.156 3.437 1.956	0.001

Mediation analyses

I combined the structural attribution items and the reversed dispositional items into a composite score where higher values indicate greater attribution towards structural factors (a = 0.91). Mediation analyses found that structural attributions significantly mediated a portion of the critical effect on punitive support, suggesting that how people understand the causal contributors to community gun violence is a mechanism in influencing individuals' support for punitive measures (ACME: b = -0.12 [-0.16, -0.07], p < 0.000; ADE: b = 0.00 [0.07, 0.07], p < 0.99).

In a mediation analysis of restorative support, the composite attribution measure mediated the critical narrative's effect (ACME: b = 0.11 [0.06, 0.16], p < 0.000; ADE: b = -0.01 [-0.09, 0.07], p < 0.79). I also found that causal attributions partially mediated willingness to share the memo, although to a lesser extent as it did with the policy support (ACME: b = 0.05 [0.03, 0.07], p < 0.000; ADE: b = 0.13 [0.04, 0.23], p < 0.006).

Table 1.8. Attributions Mediating Punitive Support in Study 3

	Estimate	95% CI Lower	95% CI Upper	p
ACME	-0.117	-0.164	-0.074	0.00
ADE	0.000	-0.071	0.072	0.99
Total Effect	-0.117	-0.198	-0.034	0.01
Prop. Mediated	1.000	0.587	2.691	0.01

Discussion

In Study 3, I replicated critical narrative effects on punitive and restorative policy support. To explore whether people's policy preferences might translate into behavior, this study measured participants' willingness to share the study material with their friends online. I found that the critical narrative was more likely to be shared and viewed as socially accepted by one's social network. This study also provided evidence for a potential mechanism behind these changes. The

Attributions Mediating Punitive Support in Study 3

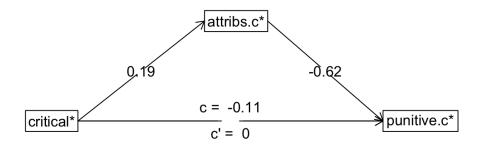


Figure 1.8. *Mediation diagram of the critical effect on punitive policy support through attributions in Study 3*

main effects on policy attitudes were partially mediated by a shift towards structural versus dispositional explanations for the racial patterns of community gun violence. This finding falls in line with the hypotheses that the new critical information may be countering the pre-existing stereotypes that may bias how people understand this issue. That is, that the understanding that this policy issue not a simple problem of something wrong with the people affected, but something wrong with the circumstances that they are in.

Study 4. Replicating critical narrative effects using a nationally representative probability sample

For Study 4, I wanted to test if these unmoderated effects would replicate in a national probability sample. Study 4 is a pre-registered test to replicate the main effects of the critical narrative on policy support and willingness to share using a nationally representative probability sample of U.S. participants (n = 1,472) in a 4 x 1 between-subjects design. This study was pre-registered before data collection on AsPredicted.org (#128686) in April 2023. NORC AmeriSpeak recruited participants to complete a 10-minute online survey about "information evaluation" (M = 14.11, SD = 7.77).

I focused on punitive support, restorative support, and willingness to share as the main

dependent variables. I also added a one-week follow-up study which measured participants' support for punitive and restorative policies. The follow-up survey was designed to be an ostensibly unrelated study that leveraged the survey firm's standard study recruitment template. Additionally, I selected the policy items that were most similar to those of major polling institutions (e.g., Gallup, Pew Research Center) so participants would be less likely to infer that surveys were related to each other. I also added a decoy set of infrastructure policies balance out the punitive and restorative policy items.

Methods

Participants

A third-party firm, NORC AmeriSpeak, recruited participants from their national panel in two waves. The firm excluded participants who dropped out prior to viewing randomized material. This sample is a nationally representative probability sample that pooled from a total of participants to recruit our target of 1,500 participants for both Time 1 and Time 2. The sample was 48% female, 77% White, 9% Black, 9% Latiné, 9% Asian, 1% Middle Eastern, and 2% of Native or Indigenous descent, with a median adjusted household income of \$37,527.77 (M = 43880.86, SD = 27477.80).

Procedure

The first survey was 10 minutes long. The second survey was 5 minutes long and conducted one week after the first survey. The surveys were delivered using the survey firm's standard procedures to reduce the likelihood of participants connecting the two surveys to the same research study. In the first survey, participants were asked to read one of four randomly assigned policy memos, summarize the main points of the memo, and complete survey questions about their opinions. Study 4 used the same narrative materials included in Study 3.

The survey firm then recruited the same participants to complete a second survey one week

after completing the first survey. The second survey did not reference the previous survey and asked for their opinions about 16 policy proposals and. Half of the items were the same punitive and restorative policies asked in the first survey. The other half of survey items were infrastructure policies. At the end of the survey, participants were fully debriefed about the connection between the two surveys.

Measures

Policy support. The survey asked participants to rate the extent to which they oppose or favor policies on a scale from 1 (*oppose a great deal*) to 7 (*favor a great deal*). Half of the items were punitive, and the other half were restorative. The items appeared in a randomized order on a single online survey page. I selected eight of the policy support items used across Studies 1 through 3 based on reliability and similarity with Pew Research Center polling items. I created composite scores that averaged the ratings of policy preferences within the punitive and restorative sub-scales. The punitive items included: more police on the streets, longer jail terms for people convicted of violent crimes, more prisons and fewer opportunities for parole, and an increase in criminal penalties and fines. The selected restorative items included: more community programs for young people, job programs for people in the inner-cities, more re-entry programs to support ex-prisoners transition to society, and increasing funds for public resources to revitalize poor areas.

Willingness to share. After the series of policy opinion questions, the survey asked, "If you had the opportunity, how likely would you be to share this memo with your friends (for example, over email or social media)?" using a scale from 1 (*extremely unlikely*) to 7 (*extremely likely*). Like in Study 3, this question included an image that displayed the top portion of the policy memo next to images of popular social media icons.

Results

Punitive support at Time 1

There was a main effect of the critical narrative reducing punitive support. The results replicated the main finding that the critical narrative decreased punitive policy support (M = 4.44, SD = 1.43; F(2,590) = 12.48, p < .001), compared to the control (M = 4.73, SD = 1.55), individual (M = 4.66, SD = 1.50), and naïve conditions (M = 4.75, SD = 1.52). This effect was once again not moderated by political orientation (F(2,588) = 0.10, p = .908).

Table 1.9. Post-hoc Comparisons of Punitive Policy Support by Condition in Study 4

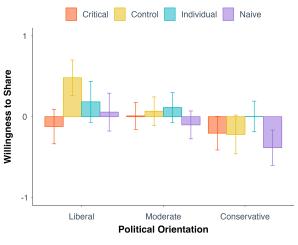
Group 1	Group 2	Est.	SE	df	CI Low	CI High	t	p
	Control					0.000		
Critical	Individual	-0.129	0.062	1729	-0.250	-0.009	-2.101	0.036
Critical	Naive	-0.168	0.060	1729	-0.286	-0.049	-2.775	0.006

Restorative support at Time 1

In contrast, there was not a main effect of condition on support for restorative policies (F(3,1,728)=1.20, p=.308). Post-hoc pairwise comparisons revealed no differences between any of the four conditions in support for restorative policies. Support for restorative policies was relatively high across all conditions. Restorative support was highest in the critical condition (M=5.74, SD=1.18) but not statistically different from the control (M=5.90, SD=1.03), individual (M=5.82, SD=1.13), or naïve conditions (M=5.84, SD=1.01).

Willingness to share

The results also replicated the main effect of the critical narrative on people's willingness to share the policy memo with their friends on social media (M = 4.06, SD = 1.77; F(3,1,723) = 4.49, p = .004). Political orientation moderated participants' likelihood of sharing (F(3,1,722) = 4.13, p = .006). Liberal participants were significantly more likely to share the



Note: The whiskers on the interaction plot represent the 95% confidence intervals Estimated values averaged over sociodemographic covariates.

Figure 1.9. Interaction Plot of Willingness to Share by Condition and Political Orientation in Study 4

critical memo than the control and naïve memo. In contrast, conservatives were significantly more likely to share the control and the individual memo than the naïve memo.

Table 1.10. Post-hoc Comparisons of Willingness to Share by Condition in Study 4

Group 1	Group 2	Est.	SE	df	CI Low	CI High	t	p
Critical	Control	0.244	0.116	1723	0.016	0.473	2.101	0.036
Critical	Individual	-0.056	0.118	1723	-0.288	0.176	-0.471	0.637
Critical	Naive	0.292	0.116	1723	0.064	0.519	2.512	0.012

Policy support after 1 week

The Time 2 survey tested whether the critical narrative has a lasting reduction on readers' support for punitive policies. Participants who read the critical narrative showed the lowest level of punitive support (M = 4.73, SD = 1.48) compared to the control (M = 4.63, SD = 1.40) individual (M = 4.71, SD = 1.44), and naive conditions (M = 4.79, SD = 1.45). However, there these differences recorded a week after reading the narrative manipulations were not significantly different (F(3,1,457) = 0.27, p = .848). Similarly, there was not an effect on restorative policy

after one week (M = 5.57, SD = 1.07; F(3, 1, 457) = 1.61, p = .185).

Discussion

In Study 4, I tested the main hypothesis of the critical narrative reducing support for punitive responses to community gun violence using a nationally representative probability sample. The results replicated the same main effects on punitive policy preferences that were found in the previous studies. Importantly, this main effect is not moderated by ideology, as found before. However, analyses did not replicate the main effect of the critical narrative on preferences for restorative policies.

The main effects on restorative support in past studies has had an overall weaker pattern than the punitive policy measure. I suspect this is largely because the information shared in the critical narrative walks readers through how "tough on crime" responses raise community-level risk factors for financial instability, loss of social cohesion, and experiences with gun violence.

The critical narratives do not provide as much information to build a clear causal understanding of how investing in community-based resources can reduce gun violence. Restorative approaches, such as improving public education and mental health resources, may be viewed as a long-term solution that leaves many vulnerable to immediate threats of community violence. Future narratives can address this by highlighting restorative strategies designed to mitigate forms of structural oppression. For example, organizers in Chicago neighborhoods recovering from the impact of housing discrimination have "buy the block" training programs for prospective homeowners and regular "cash mobs" to support local businesses. Providing a clear narrative of how such proactive approaches can be a tool mitigating violence through both shortand long-term strategies.

The results suggest that there is potential for critical narratives to increase awareness about the structural inequities underlying community gun violence. I replicated the main effect on the behavioral intention outcomes, in which I found an overall main effect of condition people's

willingness to share the critical policy memo with their social network. As in Study 3, political ideology emerges as a moderating factor in this context. The main effect was driven by the contrasts with the naïve article. As one would expect, the more liberal participants express a greater likelihood of sharing the critical narrative. Results suggest that political partisanship may differentially motivate or prevent people from sharing information that has impacted their views on gun violence and policing. The inclusion of the naïve anti-racist condition in particular highlights how there is not much nuance needed to communicate critical knowledge about racial inequality among liberal audiences to shift their policy preferences. However, conservative audiences reacted more strongly against the naïve policy memo than the critical narrative.

The moderating impact of political ideology on willingness to share also follows the same pattern as Study 3. This finding is consistent with the overall theory that attempts to promote anti-racist values without setting a foundation for critical knowledge about the reality of structural oppression—especially in racially charged social policy discussions that may threaten privileged racial group identities.

Another main question for Study 4 is whether this pattern would last. Results show that the critical narrative effect on punitive policy support is not lasting, suggesting that a single reading of this information is not enough to transform people's views. This finding underscores the importance of motivating behavior soon after the delivery of critical knowledge. That is, in order to shift policy preferences across time, there likely needs to be a shift in the dominant policy narratives, in which they initiate and sustain substantive discussions about the root causes of social inequities. This point is especially important when discussing social issues that prompt racial stereotypes because they are more susceptible to be being sensationalized and used as political tools to further oppress stigmatized groups. The lack of critical knowledge about the consequences of systemic racial disadvantages and the abundance of racially coded discussions shape public perceptions of racial patterns in crime and violence.

General Discussion

Delivering critical information is the first step in garnering public support for equitable solutions, but that is hard to do because the current political climate is hostile to the discussion of these topics. Chances to build support for repairing systems that reproduce unequal outcomes are undermined by colorblindness, over-individualizing, and pervasive racial stereotypes. In response to this challenge, Chapter 1 explored how the (lack of) critical perspectives in mainstream policy conversations about street gun violence in Black communities influences the public's racial attitudes and policy preferences.

Results suggest that a critical narrative about the U.S. history of structural racism against Black Americans can change how people of all political orientations view the problem of gun violence among communities of color, which then affects which public policies they support. Specifically, after learning how structures in the U.S. economic and criminal legal system have historically exploited Black communities, they show less support for the punitive policies that are "tough on crime" and aim to get the dangerous criminals out of society while increasing support for progressive policies that aim to reduce crime by repairing structural disadvantages.

Across the completed studies, the critical condition significantly reduced punitive policy support and increased restorative support, albeit to a lesser degree. Political orientation did not moderate these main effects.

When I tested if these effects would replicate in a national probability sample, I found that the critical narrative did have an unmoderated main effect that reduced punitive policy support. This finding did not hold when measured after one week. I also replicated the critical narrative effect that increased participants' likelihood of sharing the material with their social network. Unlike policy support, this relationship differs greatly based on political orientation. However, the critical critical narrative's positive effect on increased restorative policy support did not replicate in the national sample.

Limitations

Study 4 addresses the generalizability of these studies by seeking to replicate the critical narrative effects on policy support using a national probability sample. The stimuli were modeled after existing journalism and academic articles to mimic the experience of learning information about current events through news outlets. A consequence of this approach is that the stimuli can introduce confounds into the design by activating other psychological processes that we did not measure. I also did not counterbalance the presentation of the article's punitive and restorative expert recommendations or the order between survey sections.

Implications

Addressing the root causal mechanisms of societal disparities is foundational for developing efficient and sustainable anti-racist policy solutions. However, passing and implementing policy solutions depends on public awareness and support. The findings thus far highlight the importance of substantively explaining the causal connection between systemic racism and relevant societal problems to advance equitable solutions. Investigations of how the public understands the causal mechanisms that produce social problems can unlock insights that build support for evidence-based public policy solutions.

Evidence that the critical narrative is effective among both liberals and conservatives suggests a potential strategy to build bipartisan support for equitable policies. The large political and racial divides in the U.S. signal a need for evidence-based guidance on promoting accessible, anti-racist discourse surrounding societal problems, such as gun violence and racism.

The failure of the naïve narrative to replicate the critical narrative's shift on policy preferences highlights a pitfall of addressing structural problems without setting up the groundwork.

Approaches to advancing equity may be more fruitful if they actively challenge naïve construals of what it means to be anti-racist. My findings suggest that investment in educating audiences to

understand what structural oppression looks like and how it impacts large-scale opportunities and behavior.

Future extensions of this research may explore how fostering critical consciousness about a single policy issue may generalize to other policy domains. After all, systems of oppression are interconnected at a fundamental level. It follows that knowledge of how structural oppression operates in one context would generalize to other domains, as it operates through similar structural pathways to shape (dis)advantageous contexts.

Chapter 2

Using Critical Narratives to Promote Youth Gun Violence Prevention

Abstract

Traditional youth behavioral interventions rely on authoritative appeals that are inconsistent with prominent adolescent values of asserting independence. I present the development and evaluation of critically informed youth violence prevention intervention using a values-based psychological approach and participatory, human-centered design methods. The critical narrative exposes how community gun violence is a product of structural racism and a continued tool of racial oppression. The intervention then channels reactance from confronting inequality towards civic engagement as a meaningful way to reclaim power. By reframing civic engagement—an adaptive coping mechanism for facing racial trauma—this approach can benefit individuals while also building momentum to fight for broader social change. Two pre-registered pilot RCTs compared the impact of the critical narrative message against a traditional gun violence prevention message on attitudes towards guns and civic engagement across a sample of high school students in Chicago, IL (n = 83) and El Paso, TX (n = 117).

Introduction

A critical approach can complement youth violence intervention programs that offer individual support services by increasing the appeal of prosocial engagement by using narratives that are (1) critically conscious and (2) tailored to youths' experiences. Specifically, I expect a critical narrative to change how societal problems, like poverty and CGV, are understood by the youth living in affected neighborhoods. A narrative that can increase critical consciousness and the appeal of community engagement as a means to address the system-level risk factors for violence. I propose to test the effect of a critical narrative that exposes how gun violence is a product of structural racism and a tool of oppression against communities of color. I plan to do this by (a) aligning the narrative with adolescent values, (b) promoting critical consciousness to address the overlooked structural contributors to CGV, (c) developing skills that empower youth to navigate these structures, and (d) inviting youth to join the present research project as intellectual contributors. The following section describes the assumptions behind the present approach.

Critical components for adolescent behavior change

Alignment with adolescent values

Traditional approaches to youth behavior change tend to be effective for children but fail to persuade adolescents (Hardy, 2002; Yeager et al., 2018). A common approach to dissuade risky behavior among teens is to appeal to self-interest by reminding them to make smart choices that will pay off in the future. This approach conflicts with the values associated with adolescence as a developmental stage, such as asserting autonomy, gaining respect from peers, and having a purpose that is greater than oneself, like social justice (Dahl et al., 2018; Damon et al., 2003; Yeager et al., 2018). Developing a sense of purpose that fuels social justice-oriented actions is a promising approach to behavior change. Adopting prosocial behavior to fight against unfair problems satisfies adolescent desires to cultivate a sense of purpose in a way that takes a stand against unfair societal conditions, which is also likely to earn respect from other like-minded

peers (Bryan et al., 2016; Bryan et al., 2019).

Promote critical consciousness

Recent political campaigns to ban CRT in classrooms advocate for colorblind curricula, arguing that discussing racial inequality upsets youth and is irrelevant. Educational and psychological research investigating the impact of critical education, however, has found many benefits for youth. Although racism is upsetting, critical consciousness prepares youth to understand how society is structured, fosters adaptive coping skills in response, and motivates prosocial action towards social justice (Freire, 1970, 1974). Critical consciousness has also been connected to greater academic engagement and career aspirations among youth with low socioeconomic status, which suggests that developing critical sociopolitical analysis skills may be a potential pathway towards greater socioeconomic mobility (Diemer & Blustein, 2006; Diemer & Hsieh, 2008; Kenny et al., 2018; Rapa et al., 2018).

Harness benefits of civic engagement

A critical narrative that promotes civic engagement through raising critical consciousness has multiple benefits: (1) it offers a constructive path for youth to feel empowered and respected, (2) it is an adaptive psychological coping mechanism for facing community violence and racial discrimination, and (3) it fosters social and physical protective factors against CGV. Civic engagement is an ideal example of positive-risk taking because it provides an array of positive developmental supports, such as a strong social network with positive role models, structured activities, skill-building opportunities, and the pursuit of goals that are personally meaningful. When adolescents participate in goal-oriented, collective action, they experience a sense of belonging and social support that bolsters self-esteem and positive adjustment to challenging experiences (Galatzer-Levy & Cohler, Bertram, 1993; Hope, 2016; Lozada et al., 2016). In addition, a prominent risk factor for exposure to violence is how much time youth spend unsupervised. Increased participation in community organizations will widen youth's social

support network to include prosocial role models.

Reframe the construal of guns and respect

Guns are often regarded as a protective tool and symbol of power by young boys who must navigate dangerous neighborhoods where those who are unarmed can feel vulnerable (Fontaine et al., 2018; Stewart & Simons, 2011; Wilkinson, 2003). However, gun carrying and the presence of guns significantly increase the likelihood of becoming a victim of gun violence (Lu & Temple, 2019). I intend the critical narrative to reframe gun carrying from a sign of respect to a sign of playing into an unjust power structure built to subvert the collective power within communities of color. Rather than viewing guns as a symbol of power, the critical narrative encourages adolescents to question how gun violence and gun carrying feed into systems of white supremacy. This framing is expected to be powerful because it casts guns in opposition to adolescents' strong developmentally heightened drive for autonomy from external control and the pursuit of prosocial purpose (Damon et al., 2003; Yeager, 2017).

I expect this new construal will reduce the appeal of gun carrying to avoid signaling that they are playing into a racist power structure and increase the appeal of engaging with community organizing as a path to power. Although gun carrying increases the risks of harm, they fill an immediate need for physical and psychological safety associated with living among CGV. I offer civic engagement as a potential path to fill this need, given its psychological benefits and behavioral benefits. The critical message is also designed to redirect frustration from confronting racial inequality to motivation to challenge it through prosocial, civic engagement. I discuss how the use of design-thinking and youth participatory action research (hereafter YPAR) allow marginalized stakeholders to meaningfully contribute to the design, implementation, and impact of research programs below.

General Approach

Human-centered design-thinking methods

A key to creating long-term behavior change is to create a message that aligns with adolescents' psychological motivations and connect it to their identity and surrounding sociocultural environment. I intend to use design-thinking to develop an intervention approach that is wise to the lived experiences of youth exposed to CGV. Design thinking methods are structured to suspend normative influences that restrain imaginative solutions (IDEO, 2011). Psychologists have used design-thinking to create strategic interventions to target psychology in a way that catalyzes recursive psychological processes, which compounded into significant changes in the racial disparity in academic outcomes and in healthy eating behavior (Bryan et al., 2016; Bryan et al., 2019; IDEO, 2011; Yeager et al., 2013, 2016, 2022).

Participatory research methods

I will also use participatory methods to develop the critical narrative materials to meet this goal. Participatory research invites members of the intended participant population to offer valuable expertise in their experience of the world in which researchers study. Participatory research methods give members of the relevant population greater control over the research process to ensure that the research processes and products provide benefits as defined by the community. Collective engagement and theory-building between researchers and group members with relevant lived experiences help to bring about insights that would otherwise be washed out in traditional approaches that were developed in an inequitable context (Lewin, 1958). This approach also facilitates a full cycle of research that can reveal evidence-based insights for designing appropriate programs and policies. Youth-led participatory group discussions provide evidence for an authentic, multi-dimensional view of participants' experiences with CGV. This inclusive approach can be especially powerful when the problem being investigated uniquely impacts certain groups, such as adolescents who are traditionally denied opportunities to

participate in meaningful decisions.

One challenge with conducing YPAR research as psychological researchers is that participatory research has been developed, explored, and applied in contexts that includes relationship building, such as schools or community programs. While I continue to strive to build relationships, I want to do so meaningfully and the constraints of my position in a graduate school program and my general disconnection from this problem space exacerbated this problem. I pulled from my background in designing wise psychological interventions to explore how I could scaffold youth-led research contributions through brief, iterative design sessions. I sought to highlight YPAR goals and practices within these parameters to include youth in iterative cycles of interpreting and gathering data to build the final intervention design.

Study 1. A Community-based, Qualitative Approach to Intervention Development

In Study 1 of Chapter 2, I applied the critical narrative framework to develop an intervention to reduce youth gun carrying that centers perspectives, values, and goals, of the affected communities. Building from theories of adolescent motivation and behavior change, I created a brief 45-minute intervention designed to leverage social, developmental, and psychological factors to reframe how youth interpret gun carrying, community activism, and traditional approaches to youth gun violence prevention. The treatment intervention's central message is that gun carrying perpetuates racial injustice in communities of color and that civic engagement is a true path to the respect young adolescents seek. I present thematic analyses from qualitative interviews and discuss how the use of design-thinking and participatory methods for youth to meaningfully contribute to the design, implementation, and impact of research programs.

With this in mind, the goal of the first stage was to understand the psychological experience of those most affected by gun violence through focus groups and engagement with the pilot intervention materials. This study details the qualitative processes that informed the intervention development. I describe the prominent themes that came from interviews, focus groups, and

informational campaigns from groups and individuals who are either impacted by gun violence or involved in organizing collective responses to gun violence and community issues. This study also includes pilot data from Chicago youth who received the pilot intervention material, answered survey questions, provided open-ended feedback, and engaged in re-designing the intervention material.

These are my a priori theoretical assumptions that I seek to compare with youths' experiences through qualitative investigation:

Table 2.1. Exploratory Hypotheses for Study 1, Chapter 2

- HI. Youth value autonomy (a), peer respect (b), social justice (c), and having a prosocial purpose (d).
- H2. Guns are carried as a form of physical safety.
- *H3.* Gun carrying is viewed as a high-status signal that deters threats to safety.
- H4. Youth are familiar with topics of racism, social justice, and community gun violence.
- *H5.* Racial justice activism is appealing to youth (e.g., high-status, autonomous).
- **H6.** Connecting youth to community advocacy organizations is a protective factor against exposure to gun violence, and social pressures to carry guns.
- **H7.** Connecting youth to community advocacy organizations is a protective factor against exposure to gun violence, and social pressures to carry guns.

Methods

I compared insights from focus groups, interviews, and design workshops with the a priori theoretical assumptions. I first recruited participants from ages 11 to 25 living in Chicago neighborhoods that have high rates of gun violence. After initial rounds of focus group sessions, I narrowed the eligibility to boys ages 11 to 15. I chose these criteria because gun carrying is more common among boys (Fontaine et al., 2018) and because gun carrying has been reported to begin as early as 10 years old (DuRant et al., 1999). In addition, the transition to middle school that coincides with the developmental shift to adolescence provides an opportunity to explore and adopt new identities in a new context, which impacts their behavioral trajectory.

Procedure

Participants were recruited through community organizations sharing physical and digital fliers to their networks. The study advertisements were titled "Make Your Voice Heard" and invited local youth ages 11 to 17 to a 1-hour group interview where students share their thoughts on community safety, gun violence prevention, racial justice, and youth activism for a \$35 e-gift card compensation. It advertised that participants would receive an online \$35 gift card by email after participating and included notice that I would anonymously record the session and required permission from parents and guardians. During the sessions, I introduced the project goal of sharing the voices of young Chicagoans living in neighborhoods that are affected by gun violence to inform the policies and practices to promote community safety. At the end of each session, I invited the participants, parents, and other interested community members to join the project as expert consultants and co-designers who would be compensated for their time.

Semi-structured focus group and interviews. Interviews and focus groups were done as an iterative process where I sought out evidence that supported or were inconsistent with the a priori theoretical assumptions.

I conducted focus groups and interviews using a protocol that included a script and guiding discussion questions. In these sessions, I first asked descriptive open-ended questions about their neighborhood characteristics and daily experiences. I then asked for participants thoughts about community gun violence, policing, racism, and activism. I intended this topic order to ease into the more sensitive discussions, such as experiences with violence and police brutality. The sessions ended with questions about activism to discuss examples of what people are doing to make a difference for communities facing these problems.

When time permitted, I also explored how participants responded to the early intervention draft material to gather support for our expected outcome before implementing the intervention.

Sessions were held in person and over zoom to suit the participants' availability. At the start of the focus groups, the research team introduced themselves and gave a brief 5-minute overview

of the purpose of their visit and study. The introductory script stressed the importance of participant privacy and confidentiality and asked participants not to reveal any identifying information while sharing their opinions and experiences.

Materials

Semi-structured focus groups I created the interview protocol based on literature from trauma-informed research methods, cultural competency, healing circles, participatory youth action research, racial socialization, and motivational interviewing. Discussion questions centered around participants' attitudes and beliefs regarding gun violence in their community and pursuing civic engagement to help fight racial inequality. I aimed to sketch the sociocultural setting of areas prone to gun violence, focusing on key factors that may leverage prosocial behavior.

The first few rounds of questions were exploratory and contained more general to capture participant perspectives with as little influence from the researcher as possible. After getting a grasp on prominent themes and responses within each group, the following rounds included more specific, confirmatory questions related to our intervention hypothesis and pilot material. I also adjusted the protocol according to input from community partners and participant responses during qualitative data collection.

Intervention pilot The pilot draft was designed with a priori assumptions informed by research from critical race studies, psychology, behavioral science, and sociology. I created a 20-min pilot program that creates a counter-space to traditional adultist approaches in societal decisions that directly impact youth without respecting youths' expert knowledge on what it is like to live with the aftermath. The program engages youth about (1) how youth voices are an undervalued key to solving big societal problems, (2) the "hidden history" of how systemic racism created conditions for poverty and violence in many Black and Brown communities, and (3) examples of local youth who have been building collective community power as a way to fight back.

The program first provides a warning about the sensitive topics it discusses (i.e., gun violence, policing, and racism) and reminds viewers that participation may be stopped at any time without repercussions. The program introduction then criticizes how policies and decisions that are made on behalf of Chicago youth, often do so without their input. It affirms how youths' expertise should be taken seriously and how local Chicago youth are already taking actions to take back control of the narratives about their communities.

The first half of the video presents evidence of how the current conditions of racial and socioeconomic inequalities in South and West side Chicago neighborhoods can be traced back to effects of structural racism. It then identifies patterns of systemic racism and how explains how it contributes to racial oppression. This section is heavily based on academic and journalistic reports on how the economic and political infrastructure of communities of color are still suffering the effects of the long history of deprivation of social and economic capital on the macro, micro, interpersonal, and psychological level (Alexander, 2010; Coates, 2014, 2019; Rothstein, 2017).

The second half of the video affirms that although it may seem overwhelming to confront big problems like systemic racism, young activists of color have made incredible progress towards racial equality throughout history. This section also explain how youth-centered spaces fosters skills needed to address short and long-term problems through community organizing. It then presents modern-day success stories and quotes from youth activists from Chicago and other major cities dealing with community violence. It also includes peer quotes about how youth savvy towards technological advancements makes participating in civic justice movements easier and more powerful than ever.

The program was divided into 4 sections:

- 1. How racist housing policies disadvantaged predominately Black and Latino neighborhoods.
- 2. How the War on Drugs increased policing and imprisonment of Black and Latino men.
- 3. How these systemic disadvantages increase the risk of community gun violence.
- 4. How youth are fighting against systemic racism through community activism.

Results

I transcribed and examined participants' responses to search for converging themes. Here are some insights from focus group and interview sessions with youth and young adult participants:

- Gun access and social signaling affects ages 10+
- Children as young as 7 are aware of and/or have experienced community gun violence.
 There's often not someone to talk to about it.
- There is social pressure to join local gangs because there's safety in numbers.
- Youth activities are severely limited by the lack of available local opportunities and the dangers of leaving the house.
- They want more sports and recreational activities.
- Middle school students are familiar with activism, but it often limited to awareness of the Black Lives Matter movement online. They are less aware of local community organizers and examples of successful campaigns.
- There is a general understanding of the government's failure to take care of them, but not of specific topics related to critical race theory (e.g., Jim Crow laws, redlining).
- Learning about local youth activism is appealing but there isn't a strong presence.
- Neither policing nor activism are salient contributors to safety
- Female high school students were often highly engaged in discussing racial justice and negative attitudes towards guns. - Adults discuss how to stay safe but not how to process exposure to violence despite children's early experiences
- Gun carrying among all genders but there is strong pressure from masculinity norms
- All ages agree cycle of retaliation is a significant contributor to violence
- Some exhibit risky behavior as a response to disrespect from peers and authority figures
- Direct exposure or loss to violence can motivate purposeful nonviolence
- Decisions to pursue nonviolence also motivated financial security

I also learned from conversations with folks involved in local programs for positive youth development, community organizing, and mutual aid. These conversations yielded other information pertinent to the intervention approach:

- Violence interrupters and peer mediators proudly practice with trauma-informed and restorative justice approaches
- Much violence does come from "petty" reasons relating to respect.
- A cycle of retaliation and revenge draws out these small conflicts.
- Many youth-serving organizations offer a range of activities that directly relate to our message context, indirectly relate, or offer general positive supports.
- Rather than reinventing the wheel through a novel program, we can make our message goal
 to increase the appeal of joining community organizations, promote their services, and
 assist in scaffolding connections.

Discussion

Overall, I found that Chicago youth living in violence-affected neighborhoods are highly interested in learning more about how this problem came to be and what could be done to stop it. I found that participants who shared their perspectives on how to avoid getting involved with guns invoked the values of being an independent thinker as a way to handle disrespect and peer pressure related to fighting. In addition to discussions about how perceived disrespect from peers can contribute to violence, some participants also shared their personal experiences with unjust violence from police. A lack of respect from parents and teachers was also frequently cited as a source of frustration that contributes to feeling like young people have to find safety in numbers by connecting with peers who carry guns. These findings align with the a priori assumptions underlying the intervention's theory of behavior change and introduced important considerations.

I experienced stronger engagement through in-person sessions, whether it was one-on-one or with a group. However, groups with more than six people presented challenges. Larger groups

Factors	Participant Responses
	"You got to think about the kids that's younger than us."
Purpose	"I'm not gonna be the type to, go and do [a shooting] because I'm thinking culturally about stuff like this."
	"They try to be this image of a thugbut really they hiding behind the pain."
	"They think 'if I do this they gonna judge but if I do this then I'm gangster."
	"Kids are out here doing what they doing because their parents don't respect them."
Respect	"[Parents] don't want to sit down and talk to [their] child so they think "Ok I'm going to go deal drugs. It may hurt you but you hurt me."
	" [Police] address us like dogsand then get mad when they're aggressive back"
	"They're not going to trust the police just because they had more training."
	"I told him to stop trying to be a follower Be your own person . Be the bigger person out of the people that you hang out with. Don't be afraid to follow your own path ."
Autonomy	"If I say 'I'm gonna go do [good opportunity]' then they gonna call me lameBut then, you just let [some people surrounding you] change something that could have made you rich or famous in the future."
	"Some people feel as though you have to kill them before somebody do something to you."
Guns	"If you feel unsafe, your natural reaction is to protect yourself."
	"But now that we stopped doing stuff that's when everybody gets shot down."
Community	"it's resourceful because when we was youngeryou have like a block party or something. Everything was positive and built with love and joy in the community ."
Activism	"then there ain't no more programs out here for kids because the people doing the programs are scaredsomebody is gonna come and hurt them."

Figure 2.1. Main Themes and Participant Excerpts from Focus Group Discussions

made it difficult to hear from the more reserved participants without imposing undue social pressures to discuss a sensitive topic. Participants who were a minority member in terms of gender or age within their particular focus group also seemed more hesitant to speak out. For example, sometimes the quieter participants would perk up at a certain question or comment and lean forward as if they had something to say, but then would fall back when others responded first. When I explicitly made space for them to share, they would then briefly agree with whatever the group said disengage.

Online focus group sessions presented other challenges. When conducting focus groups over video chats, nearly all participants chose to turn off their cameras. I led sessions with my video on when possible but at times turned it off due to disruptions from weak internet connections. Some participants preferred to respond to questions over chat, which tended to be short messages. However, even in these periods of more limited engagement, participants expressed strong interest in the topics and goals of the study. Notably, engagement was boosted whenever the sessions allowed time for participants to watch the intervention pilot draft. The strong reactions to the material suggest that the periods of low engagement experienced in some groups may be a result of the session structure rather than a lack of interest in the topics. The ideal discussion setup going forward may be groups of 3 to 5 participants grouped by gender by age.

Another limitation in this study may be from researcher influence on participants' responses. In my introductions to the focus group sessions, I shared how in my experience as a first-generation citizen and college student, I witnessed how often powerful institutions neglect community perspectives when discussing solutions to social problems that directly impact them. I criticized this exclusionary practice and shared how I see similar patterns in Chicago, which is why our project seeks to hear from and collaborate with young Chicagoans to create a new type of community safety program that is for them, by them. The trade-off of being transparent about our critical approach in the early qualitative stages is that it risks influencing participants to agree with my a priori hypothesis that critical narratives are engaging to adolescents. Given the uphill

battle of community outreach and participant recruitment, the risk was outweighed by the benefit of building authentic rapport.

Study 2. Experimental evaluation of a community-based critical youth violence prevention

Study 2 describes two pre-registered pilot randomized controlled trials (n = 200) that evaluated the critical narrative strategy for motivating youth to join a youth program that advocates for safety against gun violence and related attitudes (AsPredicted #129314). The RCT compared the impact of the critical intervention message against a traditional gun violence prevention message across two student samples. I observed differences in participants' attitudes and behaviors regarding the appeal of guns and civic engagement between the two programs and two settings.

Compared to the control condition, I hypothesized that participants who receive the critical narrative would have (H1) greater interest in attending an after school program about youth violence prevention and community activism and (H2) report more negative attitudes towards guns and gun carrying. The main research questions are:

Table 2.2. *Main Hypotheses for Study 2, Chapter 2*

- *H1.* The treatment will change social status appeal and construal of guns in a more negative direction (i.e., not aligned with autonomous and prosocial values).
- **H2.** The treatment will change social identity appeal and construal of community activism as more positive (i.e., aligned with autonomous and prosocial values).

Methods

Participants

The pilot RCT in Chicago was conducted with students from the two West Side high school campuses that I partnered with in Study 1 to run focus groups and gain feedback on the intervention material. Students who participated in Study 1 were excluded from the RCT analyses. Participants were recruited from physical education classes in grades 9, 10, and 12 (n = 1)

176) and a total of (n = 83) completed the study survey. The pilot RCT in El Paso included students recruited from high school History and English classes (n = 117). Individual-level sociodemographic data were not available for this pilot study.

Procedures

I partnered with two high schools to conduct a pilot evaluation of the critical narrative intervention designed in Study 1. The delivery of the intervention program was designed to closely mirror standard classroom practices, which also allowed for schools to recruit participants using opt-out consent procedures. The schools gave students and parents advanced notice about the program evaluation study through a take-home letter. The letter describes the program evaluation study goals, procedures, and study team contact information.

The research team was introduced special guests who are asking local youth for their expert, yet traditionally overlooked, opinions on what a kinds of violence prevention programs will best support young Chicagoans. Participants were asked to watch a 20-minute video that encourages youth to get involved in prosocial, community-based programs related to violence prevention, civic engagement, employment-seeking support, and personal development. Participants were randomized on an individual level through the survey logic to view the critical or control version of the video.

Next, I asked the students to write about why they think their peers reacted in that manner to have them indirectly consider the underlying motivations. I then asked students to think and write about potential behaviors that could help reduce gun violence in their communities, with the treatment material highlighting community-oriented behaviors to reduce inequality and the control material highlighting individual strategies on how to stay away from guns. This writing exercise was designed to act on participants' potential motivations to take action in response to the intervention material. The survey then asked multiple choice questions about participants opinions on guns and activism. For the Chicago participants, the final survey question asked if they would like to participate in an after school program about community activism.

Materials

Critical narrative. I used the treatment program developed from Study 1. Feedback from focus group participants was used to ensure the language used in the material was communicated properly and at the appropriate reading level. Printouts of the intervention materials for both conditions are available in the Chapter 2 repository at https://researchbox.org/1528&PEER_REVIEW_passcode=YYVZDR.

Traditional narrative. The control material was designed to reflect traditional gun violence prevention programs. Such traditional youth violence prevention approaches often use moral- and fear-based appeals that emphasize the importance of practicing non-violence to avoid negative life outcomes. The content was pulled directly from an middle school health textbook chapters on violence prevention and focus heavily on how individual choices can lead to or prevent gun violence. (Bronson et al., 2007; Glencoe, 2005). For example, the material encouraged youth to avoid socializing with peers who are in gangs or carry guns and to avoid clothing choices that may signal gang affiliations. It also included tips to adopt safe habits, such as thinking before reacting, traveling in groups, staying in well-lit areas, and to contact police and trusted adults when feeling threatened or witnesses a threat to others' safety (e.g., "see something, say something"). The program ended with paraphrased quotes from parents, teachers, and police officers about how youth are overreacting to disrespect and need to think about their futures.

Measures

Construal of guns and gun carrying. Eight questions were combined to measure participants' construal of gun carrying as an appealing behavior that has a high social status and connected to a prosocial sense of purpose.

Gun social status. To measure the perceived social status of guns, three questions asked how negative (1 = extremely negative) or positive (5 = extremely positive) participants felt about

the idea of being around guns, personally carrying a gun in the future, and having family or friends carrying guns. The fourth question asked how much participants "respect people who carry guns" a scale from 1 (*not at all*) to 5 (*very much*).

Appeal of avoiding guns. Four items were used to measure the extent to which participants viewed avoiding guns as behavior is autonomous and connected to a prosocial purpose. Participants were asked to respond with how much they agree or disagree with a set of statements on a scale from 1 (extremely disagree) to 5 (extremely agree). The two autonomy appeal items stated, "staying away from guns is a good way to stand up to people who are trying to control us," and "a good way to take control of my life." The two prosocial appeal items stated how "staying away from guns is a way to stand up for my community," and "by staying away from guns, I can make a difference to others."

Construal of community activism. I combined seven questions to measure participants' construal of community activism as a respected social identity that appeals to participants. Similar to the gun construal questions, two items measure the construal of community activism as autonomous, and two items measured its alignment with students' sense of prosocial purpose.

Community activism social status. A composite averaging 3 items measured the extent to which community activism was viewed as an appealing social identity to participants. The items asked, "how interested are you in getting involved in community activism?" ($1 = not \ at \ all$, $5 = a \ great \ deal$), "how do you feel about being the kind of person who gets involved in community activism? ($1 = extremely \ negative$, $5 = extremely \ positive$), and "how much do you respect community activists? ($1 = not \ at \ all$, $5 = very \ much$).

Appeal of community activism. A composite averaging 4 items measuring gun avoidance as autonomous and purposeful prosocial behavior: How much do you agree or disagree

with these statements (1 = extremely disagree, 5 = extremely agree)? The two autonomous appeal items statements were "working to make my community a safer and better place is way to stand up to people who are trying to control us," and "a good way to take control of my life." The two prosocial items stated that "by working to make my community a safer and better place, I can make a difference to others," and "stand up for my community." Participants of the Chicago RCT pilot were also asked additional question that was included in the composite score for the appeal of community activism. The question asked them to rate their interest in attending an after school event about getting involved in community activism on a scale from 1 (not at all interested) to 5 (extremely interested).

Results

Simple t-tests were conducted to compare participants who were randomly assigned to either the treatment program or control program. In comparison to the standard approach, I expect participants in the experimental condition to score lower on the attitudes towards guns measure, indicating that they perceive gun ownership and gun use as less appealing and less associated with respect. I ran one-tailed t-tests on the four scales: social status appeal of gun carrying, social status of community activism, appeal of gun carrying, and appeal of community activism.

Chicago

Construal of guns. Results of the Chicago analyses did not reveal significant differences on any of the composites regarding the social status of guns (t(81) = 1.36, p = .179), the social status of activism (t(81) = 0.30, p = .768). I also did not find a significant difference between the appeal of guns (t(81) = 1.01, p = .317).

Construal of activism. Participants of the critical narrative intervention viewed activism as more appealing than those in the control group, but the difference was not significant (t(81) = 1.21, p = .228). There was also not a significant difference in the level of interest in

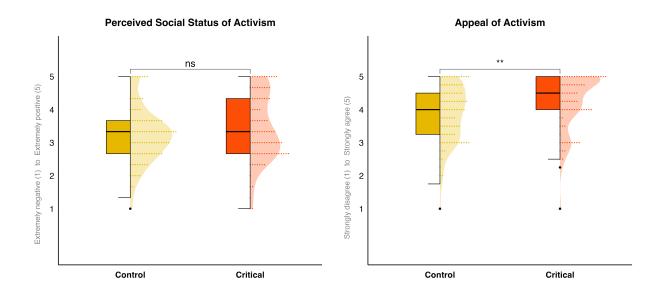


Figure 2.2. Plots Comparing Construals of Activism in the Combined Pilot RCT

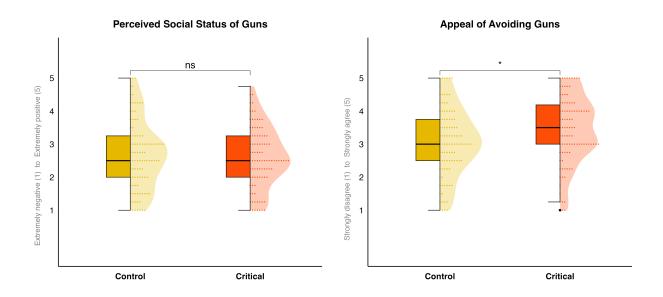


Figure 2.3. Plots Comparing Construals of Guns and Gun Carrying in the Combined Pilot RCT

participating in the related after school program about community activism (t(81) = 0.43, p = .671).

Table 2.3. Mean Differences in Construals of Activism by Condition in Chicago Pilot RCT

Dependent Variable	t	df	p	d	95% CI
Perceived Social Status of Activism	-0.29	69.66	0.77	-0.07	[-0.50, 0.37]
Appeal of Activism	-1.23	81.00	0.22	-0.27	[-0.70, 0.17]
Asserting Autonomy	-1.09	80.97	0.28	-0.24	[-0.67, 0.20]
Prosocial Purpose	-1.20	80.85	0.23	-0.26	[-0.69, 0.17]
Interest in Related After School Program	-0.43	78.22	0.67	-0.09	[-0.53, 0.34]

El Paso

Construals of guns. For attitudes towards guns, a t-test of mean differences showed that the critical narrative also decreased the appeal of guns (t(115) = 2.14, p = .035). However, there was not a conditional main effect on the perceived social status of guns (t(115) = -1.46, p = .147).

Construals of activism. Among the Texas students, the critical narrative program significantly increased the appeal of community activism (t(115) = 3.30, p = .001) compared to the control program. There was also a significant increase in the perceived social status of activism for the critical narrative group (t(115) = 1.91, p = .059).

Table 2.4. Mean Differences in Construals of Activism by Condition in El Paso Pilot RCT

Dependent Variable	t	df	p	d	95% CI
Perceived Social Status of Activism	-1.91	114.60	0.06	-0.35	[-0.72, 0.01]
Appeal of Activism	-3.30	114.96	0.00	-0.61	[-0.98, -0.24]
Asserting Autonomy	-3.55	114.90	0.00	-0.66	[-1.03, -0.28]
Prosocial Purpose	-2.73	114.59	0.01	-0.50	[-0.87, -0.14]

Discussion

The difference in results between the Chicago and Texas area samples were surprising at first, given that I had conducted qualitative investigations with youth in Chicago, including a small subset of students from the high school. Although gun violence is an issue among both high schools, students in the Chicago-area campuses face higher rates of community gun violence compared the Texas area school. The high rate of attrition among the Chicago students which may have been due to the study being conducted during students' physical education (P.E.) classes. Standard classroom reading and writing activities are mentally taxing and P.E. classes are often viewed as a more recreational break. In contrast, the El Paso subsample completed the study activities during history and English classes which may have contributed to a more controlled setting.

Another study limitation is the lack of individual-level sociodemographic information.

Although all genders share experiences with gun violence, young boys and men are at greater risk of gun carrying and experiencing gun violence. To the extent that the critical narratives paints the activism as an appealing identity that is respected by their peers, I expect that the intervention would show stronger effects among male participants.

This hypothesis is supported by developmental neuroscience evidence that male adolescents are more attuned to social status hierarchies. However, if this intervention message fails to make a realistic and convincing argument that activism can be an respected and reliable path to safety, the critical narrative may resonate more with female participants given their high levels of engagement during the qualitative study.

General Discussion

The pair of Chapter 2 studies sought to design and evaluate the impact of applying a critical narrative elements to youth violence prevention messages to motivate greater participation in protective, positive youth engagement programs. The results of the qualitative investigation and

pilot RCT provide evidence that adolescents affected by community gun violence have strong feelings and positions on the topics of racism and gun violence.

The mixed results of the pilot RCTs suggest that these issues are complex and sensitive to the surrounding context. The results of these studies highlight why it is important for youth gun violence intervention research partner with local communities who are in close proximity to this issue. Building such partnerships is an uphill battle that benefits from critical discussions about how the research project is carried out.

Researching difficult-to-reach populations, such as youth living in community gun violence, requires significant and consistent investments in time, money, and a genuine willingness to center the group's needs. Community-based qualitative investigations challenge researchers to reflect and share their positions of power in collaboration

Critiquing the status quo of research methods is important for connecting with communities that have been systematically harmed or excluded by these institutions in the past. The critical, community-based, participatory nature of this project is reflected in our grounding theory of change, methods, and our team's interactions with our partners and participants. For example, the protocols for introducing our research to participants are embedded with critiques about how traditional practices in research and policymaking. Our script affirms the expertise of participants and community members on the main topics under study and criticizes how adults often make decisions that impact youth without asking for their side of the story. This disclosure helped build rapport and set the tone that our project activities are spaces where participants can share their honest opinions.

Future directions

For future directions, I am meeting with the school partners to review the results of these pilot studies and prepare for a large-scale RCT. The school staff, community leaders, and participants from both samples have been invited to exchange insights and facilitate in interpreting these pilot

results to continue improving the intervention material and design. I intend to use these pilot results to spark discussion among the participants and their surrounding community members through participatory research workshops. To engage more deeply in youth participatory action research methods, I plan to have select group of participants from the pilot RCT to join the research team as "Youth Ambassadors" who will be asked to elaborate their interpretation of the written responses and contribute to the intervention research approach, design, and material as intellectual contributors.

Appendix A

Chapter 1 Supplemental Information

Table A.1. Participant Sociodemographics across Chapter 1 Studies

	Study 1 $(n = 602)$	Study 2 $(n = 1,043)$	Study 3 $(n = 1,500)$	Study 4 $(n = 1,472)$
Political orientation:				
Liberal	322 (53.5%)	311 (29.8%)	892 (59.5%)	342 (23.5%)
Moderate	109 (18.1%)	300 (28.8%)	286 (19.1%)	719 (49.4%)
Conservative	171 (28.4%)	432 (41.4%)	322 (21.5%)	395 (27.1%)
Political party:				
Democrat	283 (47.0%)	377 (36.1%)	713 (47.5%)	687 (46.7%)
Republican	129 (21.4%)	372 (35.7%)	243 (16.2%)	548 (37.3%)
Independent	165 (27.4%)	262 (25.1%)	427 (28.5%)	235 (16.0%)
Other	6 (1.00%)	12 (1.15%)	35 (2.33%)	0 (0.00%)
None	19 (3.16%)	20 (1.92%)	82 (5.47%)	0 (0.00%)
Gender:				
Female	294 (48.8%)	513 (49.2%)	726 (48.4%)	702 (47.7%)
Male	301 (50.0%)	527 (50.5%)	727 (48.5%)	770 (52.3%)
Non-binary	3 (0.50%)	0 (0.00%)	29 (1.93%)	0 (0.00%)
Other	0 (0.00%)	0 (0.00%)	16 (1.07%)	0 (0.00%)
Prefer not to say	4 (0.66%)	3 (0.29%)	2 (0.13%)	0 (0.00%)
Racial/ethnic identity:				
White	424 (70.4%)	852 (81.7%)	1049 (69.9%)	986 (67.0%)
Black	49 (8.14%)	77 (7.38%)	108 (7.20%)	161 (10.9%)
Hispanic	33 (5.48%)	24 (2.30%)	78 (5.20%)	232 (15.8%)
Other	96 (15.9%)	90 (8.63%)	265 (17.7%)	93 (6.32%)
Age	37.4 (11.0)	54.9 (18.1)	38.2 (13.7)	49.6 (17.6)
Education:				
No college degree	208 (34.6%)	368 (35.3%)	479 (32.1%)	335 (22.8%)
College degree	309 (51.3%)	396 (38.0%)	797 (53.3%)	912 (62.0%)
Graduate degree	85 (14.1%)	279 (26.7%)	218 (14.6%)	225 (15.3%)
Adj. Income	39961 (23117)	52596 (31349)	43881 (27478)	51807 (31226)

Note. Categorical variables display the count and percentage. Continuous variables display the mean and standard deviation.

 Table A.2. Descriptive Statistics of Main Dependent Variables across Chapter 1

	Study 1 $(n = 602)$	Study 2 $(n = 1,043)$	Study 3 $(n = 1,500)$	Study 4 (<i>n</i> = 1,472)
Punitive Policy Suppor	rt			
Mean (SD)	2.41 (0.729)	4.46 (1.44)	3.89 (1.62)	4.69 (1.51)
Median [Min, Max]	2.50 [1.00, 4.00]	4.50 [1.00, 7.00]	4.00 [1.00, 7.00]	4.75 [1.00, 7.00]
Punitive Policy Suppor	rt (after 1 week)			
Mean (SD)				4.71 (1.44)
Median [Min, Max]				4.75 [1.00, 7.00]
Restorative Policy Sup	port			
Mean (SD)	3.16 (0.551)	4.92 (1.21)	6.08 (0.951)	5.82 (1.09)
Median [Min, Max]	3.25 [1.00, 4.00]	5.00 [1.00, 7.00]	6.33 [1.00, 7.00]	6.00 [1.00, 7.00]
Restorative Policy Sup	port (after 1 week)		
Mean (SD)	•	•		5.55 (1.05)
Median [Min, Max]	•			5.50 [1.50, 7.00]
Punitive budget alloca	tion			
Mean (SD)			29.3 (23.4)	
Median [Min, Max]	•		25.0 [0, 100]	
Willingness to share m	nemo with friends			
Mean (SD)			4.20 (1.94)	3.90 (1.77)
Median [Min, Max]	•		5.00 [1.00, 7.00]	4.00 [1.00, 7.00]
Attributions for Gun V	Violence			
Mean (SD)			3.62 (0.865)	
Median [Min, Max]	•		3.70 [1.05, 5.00]	

Appendix B

Ch.1 Study 1 Supplemental Information

Table B.1. Descriptive Statistics and Correlations of Policy Variables Items in Study 1

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. punitive	2.41	0.73									
2. pun_cops	2.76	0.87	.77**								
3. pun_jailtime	2.82	0.95	.78**	.52**							
4. pun_penalty	2.11	0.92	.82**	.48**	.48**						
5. pun_prisons	1.95	0.91	.83**	.50**	.49**	.66**					
6. restorative	3.16	0.55	43**	26**	29**	39**	44**				
7. rest_banbox	2.41	0.93	39**	27**	32**	32**	33**	.71**			
8. rest_fedaid	2.98	0.93	37**	24**	26**	32**	36**	.80**	.44**		
9. rest_youth	3.64	0.57	18**	06	06	19**	26**	.65**	.18**	.34**	
10. rest_jobs	3.61	0.62	24**	10*	12**	26**	29**	.69**	.21**	.39**	.59**

Note. M = mean. SD = standard deviation. Square brackets = 95% confidence interval. Composite variables are in bold.

^{*} indicates p < .05. ** indicates p < .01.

Table B.2. Punitive Policy Support by Condition in Study 1

Predictor	SS	df	MS	F	р	$\eta^2_{partial}$	95% CI
(Intercept)	111.17	1	111.17	152.40	<.001		
Condition	18.21	2	9.11	12.48	<.001	.04	[.01, .07]
Political Orientation	111.64	1	111.64	153.06	<.001	.21	[.15, .26]
Female	5.93	1	5.93	8.13	.005	.01	[.00, .04]
Racial/ethnic Identity	1.15	3	0.38	0.52	.666	.00	[.00, .01]
Age	1.08	1	1.08	1.47	.225	.00	[.00, .02]
Education	0.64	2	0.32	0.44	.645	.00	[.00, .01]
Adj. Income	0.11	1	0.11	0.15	.699	.00	[.00, .01]
Error	430.36	590	0.73				

Table B.3. Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orientation in Study 1

Contrast	b	SE	df	t	p
Political Liberals					
Critical - Control	-0.517	0.114	585	-4.519	0.000
Critical - Individual	-0.362	0.127	585	-2.843	0.009
Political Moderates					
Critical - Control	-0.333	0.194	585	-1.719	0.156
Critical - Individual	-0.232	0.213	585	-1.093	0.453
Political Conservatives					
Critical - Control	-0.424	0.172	585	-2.460	0.026
Critical - Individual	-0.265	0.167	585	-1.585	0.192

 Table B.4. Restorative Policy Support by Condition in Study 1

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	5.05	1	5.05	7.17	.008		
Condition	10.33	2	5.17	7.33	.001	.02	[.00, .05]
Political Orientation	173.61	1	173.61	246.40	<.001	.29	[.24, .35]
Female	0.83	1	0.83	1.17	.279	.00	[.00, .02]
Racial/ethnicy Identity	1.64	3	0.55	0.78	.507	.00	[.00, .02]
Age	0.06	1	0.06	0.08	.779	.00	[.00, .01]
Education	4.69	2	2.35	3.33	.037	.01	[.00, .03]
Adj. Income	0.41	1	0.41	0.58	.446	.00	[.00, .01]
Error	415.70	590	0.70				

Table B.5. Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 1

Contrasts	Est.	SE	df	t	p
Political Liberals					
Critical - Control	0.388	0.114	585	3.390	0.001
Critical - Individual	0.333	0.127	585	2.615	0.017
Political Moderates					
Critical - Control	0.428	0.194	585	2.208	0.052
Critical - Individual	0.337	0.213	585	1.582	0.204
Political Conservatives					
Critical - Control	0.201	0.173	585	1.162	0.390
Critical - Individual	0.300	0.168	585	1.788	0.128

Appendix C

Ch.1 Study 1 Full Sample Supplemental Information

Table C.1. Participant Sociodemographics in Study 1 Full Sample

	Total $(n = 742)$	Critical (<i>n</i> = 244)	Control $(n = 258)$	Individual $(n = 240)$
Political orientation:		, ,	, ,	
Liberal	362 (48.8%)	120 (49.2%)	140 (54.3%)	102 (42.5%)
Moderate	127 (17.1%)	52 (21.3%)	41 (15.9%)	34 (14.2%)
Conservative	253 (34.1%)	72 (29.5%)	77 (29.8%)	104 (43.3%)
Political party:	,	, ,	, ,	,
Democrat	339 (45.7%)	115 (47.1%)	133 (51.6%)	91 (37.9%)
Republican	192 (25.9%)	56 (23.0%)	65 (25.2%)	71 (29.6%)
Independent	184 (24.8%)	67 (27.5%)	51 (19.8%)	66 (27.5%)
Other	6 (0.81%)	3 (1.23%)	2 (0.78%)	1 (0.42%)
None	21 (2.83%)	3 (1.23%)	7 (2.71%)	11 (4.58%)
Gender:				
Female	339 (45.7%)	112 (45.9%)	124 (48.1%)	103 (42.9%)
Male	395 (53.2%)	130 (53.3%)	132 (51.2%)	133 (55.4%)
Non-binary	3 (0.40%)	0 (0.00%)	0 (0.00%)	3 (1.25%)
Other	1 (0.13%)	1 (0.41%)	0 (0.00%)	0 (0.00%)
Prefer not to say	4 (0.54%)	1 (0.41%)	2 (0.78%)	1 (0.42%)
Racial/ethnic identity:				
White	497 (67.0%)	152 (62.3%)	172 (66.7%)	173 (72.1%)
Black	98 (13.2%)	32 (13.1%)	33 (12.8%)	33 (13.8%)
Hispanic	40 (5.39%)	19 (7.79%)	10 (3.88%)	11 (4.58%)
Other	107 (14.4%)	41 (16.8%)	43 (16.7%)	23 (9.58%)
Age	37.1 (10.9)	37.0 (10.5)	37.1 (11.3)	37.3 (10.9)
Education:				
No college degree	226 (30.5%)	77 (31.6%)	85 (32.9%)	64 (26.7%)
College degree	384 (51.8%)	127 (52.0%)	126 (48.8%)	131 (54.6%)
Graduate degree	132 (17.8%)	40 (16.4%)	47 (18.2%)	45 (18.8%)
Adj. Income	37936 (22196)	38166 (21382)	37928 (22235)	37711 (23040)

Note. Categorical variables display the count and percentage. Continuous variables display the mean and standard deviation. Reported sample includes participants who failed all three rounds of comprehension checks.

Table C.2. Post-hoc Comparisons of Punitive Policy Support by Condition in Study 1 Full Sample

Contrast	Est.	SE	df	t	p
Critical - Control Critical - Individual	0.070	0.077		-4.858 -2.796	0.00

Table C.3. Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orientation in Study 1 Full Sample

Contrast	b	SE	df	t	p
Political Liberals					
Critical - Control	-0.505	0.108	725	-4.666	0.000
Critical - Individual	-0.265	0.118	725	-2.251	0.046
Political Moderates					
Critical - Control	-0.178	0.182	725	-0.980	0.525
Critical - Individual	-0.071	0.192	725	-0.371	0.909
Political Conservatives					
Critical - Control	-0.412	0.142	725	-2.897	0.007
Critical - Individual	-0.320	0.133	725	-2.403	0.031

Table C.4. Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 1

Contrasts	Est.	SE	df	t	p
Critical - Control Critical - Individual	0.318 0.239	0.11 0.12	725 725	2.876 1.983	0.008 0.087
Political Moderates Critical - Control Critical - Individual	0.372 0.238	0.186 0.196	725 725	2.005 1.212	0.084 0.381
Political Conservatives Critical - Control Critical - Individual	0.143 0.237	0.145 0.136	725 725	0.985 1.742	0.504 0.143

Appendix D

Ch.1 Study 2 Supplemental Information

Table D.1. Descriptive Statistics of Policy Support Scales and Items in Study 2

	Total $(n = 1,043)$	Critical $(n = 507)$	Naive (<i>n</i> = 536)	p
Punitive Policy Support	4.46 (1.44)	4.16 (1.43)	4.74 (1.38)	< 0.001
'More police on the streets'	4.94 (1.65)	4.68 (1.64)	5.17 (1.63)	< 0.001
'Longer jail terms for those convicted of violent crimes'	5.13 (1.66)	4.89 (1.71)	5.36 (1.57)	< 0.001
'Increase criminal penalties and fines'	3.99 (1.81)	3.64 (1.80)	4.32 (1.75)	< 0.001
'More prisons and fewer opportunities for parole'	3.79 (1.87)	3.44 (1.87)	4.12 (1.82)	< 0.001
Restorative Policy Support	4.92 (1.21)	4.99 (1.25)	4.84 (1.17)	0.048
'Remove criminal-history questions from employment applications'	3.75 (1.75)	4.01 (1.74)	3.51 (1.73)	< 0.001
'More federal assistance to the poor'	4.58 (1.79)	4.65 (1.79)	4.51 (1.79)	0.203
'More community programs for young people'	5.69 (1.38)	5.68 (1.44)	5.70 (1.33)	0.823
'Job programs for people in the inner-cities'	5.65 (1.35)	5.64 (1.38)	5.66 (1.32)	0.798

Note. Values represent the mean and standard deviation. The composite variables are in bold.

Table D.2. Punitive Policy Support by Condition in Study 2

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	7.03	1	7.03	8.29	.004		
Condition	39.23	1	39.23	46.25	<.001	.04	[.02, .07]
Political Orientation	110.07	1	110.07	129.77	<.001	.11	[.08, .15]
Female	0.65	1	0.65	0.76	.383	.00	[.00, .01]
Racial/ethnicy Identity	6.06	3	2.02	2.38	.068	.01	[.00, .02]
Age	1.38	1	1.38	1.63	.202	.00	[.00, .01]
Education	0.58	2	0.29	0.34	.709	.00	[.00, .01]
Adj. Income	0.03	1	0.03	0.03	.861	.00	[.00, .00]
Error	875.35	1032	0.85				

Table D.3. Punitive Policy Support by Condition and Political Orientation in Study 2

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	7.04	1	7.04	8.30	.004		
Condition	39.31	1	39.31	46.37	<.001	.04	[.02, .07]
Political Orientation	66.87	1	66.87	78.88	<.001	.07	[.04, .10]
Female	0.54	1	0.54	0.64	.426	.00	[.00, .01]
Racial/ethnicy Identity	6.06	3	2.02	2.38	.068	.01	[.00, .02]
Age	1.35	1	1.35	1.59	.207	.00	[.00, .01]
Education	0.49	2	0.24	0.29	.748	.00	[.00, .01]
Adj. Income	0.03	1	0.03	0.04	.840	.00	[.00, .00]
Condition x Political	1.30	1	1.30	1.53	.216	.00	[.00, .01]
Error	874.05	1031	0.85				

Table D.4. Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orientation in Study 2

Contrast	b	SE	df	t	p
Political Liberals Critical - Naive	-0.451	0.106	1029	-4.254	0
Political Moderates Critical - Naive		0.107	1029	-3.786	0
Political Conservation Critical - Naive		0.089	1029	-3.611	0

Table D.5. Restorative Policy Support by Condition in Study 2

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.01	1	0.01	0.01	.937		
Condition	4.20	1	4.20	4.93	.027	.00	[.00, .02]
Political Orientation	129.76	1	129.76	152.39	<.001	.13	[.09, .17]
Female	6.23	1	6.23	7.31	.007	.01	[.00, .02]
Racial/ethnic Identity	4.32	3	1.44	1.69	.167	.00	[.00, .01]
Age	1.14	1	1.14	1.34	.247	.00	[.00, .01]
Education	9.99	2	5.00	5.87	.003	.01	[.00, .03]
Adj. Income	5.79	1	5.79	6.80	.009	.01	[.00, .02]
Error	878.77	1032	0.85				

Table D.6. Restorative Policy Support by Condition and Political Orientation in Study 2

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.01	1	0.01	0.01	.938		
Condition	4.19	1	4.19	4.92	.027	.00	[.00, .02]
Political Orientation	59.71	1	59.71	70.06	<.001	.06	[.04, .09]
Female	6.32	1	6.32	7.41	.007	.01	[.00, .02]
Racial/ethnic Identity	4.18	3	1.39	1.63	.180	.00	[.00, .01]
Age	1.15	1	1.15	1.35	.245	.00	[.00, .01]
Education	10.09	2	5.04	5.92	.003	.01	[.00, .03]
Adj. Income	5.74	1	5.74	6.74	.010	.01	[.00, .02]
Condition x Political	0.15	1	0.15	0.17	.679	.00	[.00, .01]
Error	878.62	1031	0.85				

Table D.7. Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 2

Contrasts	Est.	SE	df	t	p
Political Liberals Critical - Naive	0.066	0.106	1029	0.623	0.534
Political Moderates Critical - Naive		0.107	1029	1.255	0.21
Political Conservat Critical - Naive		0.089	1029	1.687	0.092

Appendix E

Ch.1 Study 3 Supplemental Information

 $\textbf{Table E.1.} \ \textit{Descriptive Statistics of Main Dependent Variables in Study 3}$

	Total $(n = 1,500)$	Critical $(n = 369)$	Control $(n = 387)$	Individual $(n = 368)$	Naive $(n = 376)$	p
Punitive Policy Support	3.89 (1.62)	3.56 (1.49)	4.08 (1.67)	3.85 (1.58)	4.06 (1.66)	< 0.001
Restorative Policy Support	6.08 (0.95)	6.19 (0.88)	6.00 (0.97)	6.07 (0.99)	6.05 (0.95)	0.047
Punitive budget allocation	29.3 (23.4)	26.6 (22.1)	32.7 (24.9)	28.1 (22.0)	29.5 (24.0)	0.002
Willingness to share memo with friends	4.20 (1.94)	4.78 (1.78)	3.91 (1.91)	4.15 (2.00)	3.99 (1.96)	< 0.001
Attributions for Gun Violence	3.62 (0.86)	3.79 (0.85)	3.53 (0.88)	3.56 (0.82)	3.60 (0.89)	< 0.001

Note. Values represent the mean and standard deviation.

Table E.2. Descriptive Statistics and Correlations of Main Dependent Variables in Study 3

Variable	N	М	SD	1	2	3	4	5
1. punitive	1500	3.89	1.62					
2. restorative	1500	6.08	0.95	36**				
3. budget.pun	1500	29.28	23.38	.73**	60**			
4. share	1500	4.20	1.94	03	.37**	17**		
attrib.sys	1500	3.98	0.93	49**	.78**	64**	.37**	
6. attrib.disp	1500	2.74	1.08	.70**	43**	.62**	10**	48**

Note. M = mean. SD = standard deviation. Square brackets = 95% confidence interval.

^{*} indicates p < .05. ** indicates p < .01.

8

 Table E.3. Descriptive Statistics of Policy Support Scales and Items in Study 3

	Critical $(n = 369)$	Control $(n = 387)$	Individual $(n = 368)$	Naive $(n = 376)$	p
Punitive Policy Support	3.56 (1.49)	4.08 (1.67)	3.85 (1.58)	4.06 (1.66)	< 0.001
More police on the street to arrest criminals	3.49 (1.89)	4.08 (2.02)	3.81 (1.96)	4.00 (2.07)	< 0.001
Increase the severity of criminal penalties and fines	3.48 (1.97)	4.14 (2.07)	3.84 (1.96)	4.18 (2.10)	< 0.001
Longer prison sentences and fewer opportunities for parole	2.72 (1.77)	3.58 (2.05)	3.29 (1.90)	3.57 (2.08)	< 0.001
Invest in technology to identify and apprehend criminals'	4.16 (1.81)	4.48 (1.88)	4.37 (1.85)	4.44 (1.90)	0.091
Invest in police-led community programs to increase crime tips'	4.08 (1.82)	4.37 (1.85)	4.15 (1.85)	4.32 (1.86)	0.100
Seize property from people involved in gun-related crimes'	3.41 (1.87)	3.81 (2.00)	3.66 (1.85)	3.84 (1.96)	0.009
Restorative Policy Support	6.19 (0.88)	6.00 (0.97)	6.07 (0.99)	6.05 (0.95)	0.047
More community programs for young people'	6.42 (0.94)	6.34 (1.06)	6.42 (0.99)	6.35 (0.95)	0.546
Job programs for people in the inner-cities'	6.42 (0.98)	6.26 (1.02)	6.27 (1.07)	6.29 (1.07)	0.122
More federal assistance to the poor'	5.69 (1.61)	5.48 (1.72)	5.63 (1.63)	5.51 (1.72)	0.257
Increasing funds for public resources to revitalize poor areas'	6.37 (1.00)	6.17 (1.21)	6.27 (1.13)	6.24 (1.17)	0.109
More re-entry programs to support ex-prisoners transition to society'	6.26 (1.04)	5.91 (1.33)	5.89 (1.30)	6.05 (1.21)	< 0.001
Invest in community-led peacekeeping organizations'	5.97 (1.21)	5.83 (1.23)	5.96 (1.32)	5.88 (1.31)	0.374

Note. Values represent the mean and standard deviation. The composite variables are in bold.

Table E.4. Punitive Policy Support by Condition in Study 3

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	5.19	1	5.19	7.74	.005		
Condition	20.15	3	6.72	10.02	<.001	.02	[.01, .03]
Political Orientation	382.96	1	382.96	571.48	<.001	.28	[.24, .31]
Female	0.01	1	0.01	0.02	.894	.00	[.00, .00]
Racial/ethnicy Identity	3.87	3	1.29	1.93	.123	.00	[.00, .01]
Age	28.13	1	28.13	41.97	<.001	.03	[.01, .05]
Education	0.84	2	0.42	0.62	.536	.00	[.00, .01]
Adj. Income	3.75	1	3.75	5.60	.018	.00	[.00, .01]
Error	992.45	1481	0.67				

Table E.5. Post-hoc Comparisons of Punitive Policy Support by Condition in Study 3

Contrast	Est.	SE	df	t	p
Critical - Control	-0.300	0.060	1481	-5.017	0.000
Critical - Individual	-0.198	0.061	1481	-3.266	0.003
Critical - Naive	-0.269	0.060	1481	-4.451	0.000

Table E.6. Punitive Policy Support by Condition and Political Orientation in Study 3

Predictor	SS	df	MS	F	р	$\eta^2_{partial}$	95% CI
(Intercept)	5.28	1	5.28	7.88	.005	1	
Condition	20.16	3	6.72	10.03	<.001	.02	[.01, .03]
Political Orientation	78.96	1	78.96	117.78	<.001	.07	[.05, .10]
Female	0.01	1	0.01	0.02	.888	.00	[.00, .00]
Racial/ethnicy Identity	3.86	3	1.29	1.92	.124	.00	[.00, .01]
Age	27.82	1	27.82	41.50	<.001	.03	[.01, .05]
Education	0.83	2	0.41	0.62	.538	.00	[.00, .01]
Adj. Income	3.72	1	3.72	5.55	.019	.00	[.00, .01]
Condition x Political	1.65	3	0.55	0.82	.482	.00	[.00, .01]
Error	990.80	1478	0.67				

Table E.7. Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orientation in Study 3

Contrast	b	SE	df	t	р
Political Liberals					
Critical - Control	-0.233	0.081	1474	-2.868	0.012
Critical - Individual	-0.165	0.081	1474	-2.043	0.104
Critical - Naive	-0.243	0.083	1474	-2.936	0.010
Political Moderates					
Critical - Control	-0.405	0.145	1474	-2.799	0.014
Critical - Individual	-0.298	0.153	1474	-1.941	0.132
Critical - Naive	-0.223	0.139	1474	-1.606	0.255
Political Conservatives					
Critical - Control	-0.495	0.134	1474	-3.687	0.001
Critical - Individual	-0.258	0.138	1474	-1.866	0.153
Critical - Naive	-0.456	0.137	1474	-3.321	0.003

 $\textbf{Table E.8.} \ \textit{Restorative Policy Support by Condition in Study 3}$

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.71	1	0.71	1.04	.308		
Condition	5.05	3	1.68	2.46	.061	.00	[.00, .01]
Political Orientation	403.36	1	403.36	590.75	<.001	.29	[.25, .32]
Female	6.27	1	6.27	9.18	.002	.01	[.00, .02]
Racial/ethnicy Identity	5.20	3	1.73	2.54	.055	.01	[.00, .01]
Age	0.69	1	0.69	1.01	.314	.00	[.00, .01]
Education	0.86	2	0.43	0.63	.534	.00	[.00, .01]
Adj. Income	7.33	1	7.33	10.74	.001	.01	[.00, .02]
Error	1011.21	1481	0.68				

 Table E.9. Post-hoc Comparisons of Restorative Policy Support by Condition in Study 3

Contrast	Est.	SE	df	t	p
Critical - Control	0.184	0.073	1481	0.040	0.327
Critical - Individual	0.158	0.074	1481	0.012	0.303
Critical - Naive	0.100	0.074	1481	-0.045	0.245

Table E.10. Restorative Policy Support by Condition and Political Orientation in Study 3

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.74	1	0.74	1.09	.296		
Condition	5.24	3	1.75	2.56	.054	.01	[.00, .01]
Political Orientation	83.82	1	83.82	122.77	<.001	.08	[.05, .10]
Female	6.28	1	6.28	9.20	.002	.01	[.00, .02]
Racial/ethnicy Identity	5.20	3	1.73	2.54	.055	.01	[.00, .01]
Age	0.74	1	0.74	1.09	.297	.00	[.00, .01]
Education	0.74	2	0.37	0.54	.583	.00	[.00, .00]
Adj. Income	7.23	1	7.23	10.59	.001	.01	[.00, .02]
Condition x Political	2.10	3	0.70	1.03	.380	.00	[.00, .01]
Error	1009.10	1478	0.68				

Table E.11. Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 3

Contrasts	Est.	SE	df	t	p
Political Liberals					
Critical - Control	0.114	0.081	1474	1.409	0.355
Critical - Individual	0.064	0.081	1474	0.797	0.763
Critical - Naive	0.077	0.082	1474	0.932	0.671
Political Moderates					
Critical - Control	0.440	0.144	1474	3.055	0.006
Critical - Individual	0.330	0.153	1474	2.161	0.080
Critical - Naive	0.274	0.138	1474	1.981	0.121
Political Conservatives					
Critical - Control	0.096	0.134	1474	0.716	0.813
Critical - Individual	0.158	0.137	1474	1.148	0.518
Critical - Naive	0.021	0.137	1474	0.156	0.997

Table E.12. Post-hoc Comparisons of Punitive Budget Allocation by Condition in Study 3

Contrast	Est.	SE	df	t	p
Critical - Control	-0.226	0.057	1481	-3.973	0.000
Critical - Individual	-0.075	0.058	1481	-1.310	0.414
Critical - Naive	-0.063	0.058	1481	-1.091	0.559

Table E.13. Post-hoc Comparisons of Punitive Budget Allocation by Condition and Political Orientation in Study 3

Contrast	b	SE	df	t	p
Political Liberals					
Critical - Control	-0.186	0.077	1474	-2.408	0.043
Critical - Individual	-0.038	0.077	1474	-0.492	0.928
Critical - Naive	-0.041	0.079	1474	-0.520	0.916
Political Moderates					
Critical - Control	-0.203	0.137	1474	-1.476	0.321
Critical - Individual	-0.143	0.146	1474	-0.981	0.640
Critical - Naive	-0.032	0.132	1474	-0.240	0.991
Political Conservatives					
Critical - Control	-0.454	0.128	1474	-3.561	0.001
Critical - Individual	-0.152	0.131	1474	-1.162	0.508
Critical - Naive	-0.259	0.130	1474	-1.989	0.117

 Table E.14. Post-hoc Comparisons of Willingness to Share by Condition in Study 3

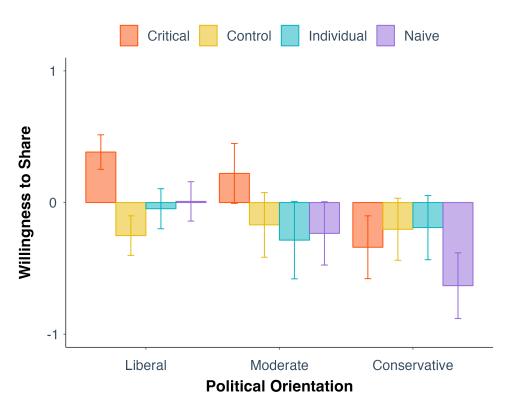
Group 1	Group 2	Est.	SE	df	CI Low	CI High	t	p
Critical	Control	0.816	0.137	1477	0.547	1.085	5.952	< 0.001
Critical	Individual	0.622	0.139	1477	0.350	0.893	4.488	< 0.001
Critical	Naive	0.742	0.139	1477	0.470	1.014	5.346	< 0.001

Table E.15. Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation in Study 3

Contrasts	Est.	SE	df	t	p
Political Liberals					
Critical - Control	1.250	0.176	1470	7.091	0.000
Critical - Individual	0.847	0.175	1470	4.830	0.000
Critical - Naive	0.768	0.180	1470	4.262	0.000
Political Moderates					
Critical - Control	0.759	0.314	1470	2.418	0.042
Critical - Individual	0.997	0.334	1470	2.988	0.008
Critical - Naive	0.869	0.302	1470	2.883	0.011
Political Conservatives					
Critical - Control	-0.278	0.291	1470	-0.954	0.654
Critical - Individual	-0.312	0.300	1470	-1.041	0.592
Critical - Naive	0.577	0.298	1470	1.937	0.131

Likelihood of Sharing the Material Online ***** (2) 7 6 6 3 2 1 Critical Control Individual Naive

Figure E.1. Plot of Willingness to Share by Condition in Study 3



Note: The whiskers on the interaction plot represent the 95% confidence intervals. Estimated values averaged over sociodemographic covariates.

Figure E.2. Willingness to Share by Condition and Political Orientation in Study 3

 $\textbf{Table E.16.} \ \textit{Attributions for Community Gun Violence by Condition in Study 3}$

Term	SS	df	Statistic	p
Intercept	4900.133	1	12722.378	0.000
Condition	12.876	3	11.144	0.000
Political orientation	470.083	1	1220.493	0.000
Female	3.085	1	8.011	0.005
Racial/ethnic Identity	4.572	7	1.696	0.106
Age	5.877	1	15.259	0.000
Education	1.303	2	1.692	0.185
Adj. Income	0.121	1	0.314	0.575
Residuals	568.879	1477	NA	NA

 $\textbf{Table E.17.} \ \textit{Post-hoc Comparisons of Attributions by Condition in Study 3}$

Group 1	Group 2	Est.	SE	df	CI Low	CI High	t	p
Critical	Control	0.220	0.045	1477	0.131	0.309	4.845	0.000
Critical	Individual	0.233	0.046	1477	0.143	0.323	5.085	0.000
Critical	Naive	0.125	0.046	1477	0.035	0.215	2.712	0.007

 $\textbf{Table E.18.} \ \textit{Attributions Mediating Punitive Support in Study 3}$

	Estimate	95% CI Lower	95% CI Upper	p-value
ACME	-0.117	-0.164	-0.074	0.00
ADE	0.000	-0.071	0.072	0.99
Total Effect	-0.117	-0.198	-0.034	0.01
Prop. Mediated	1.000	0.587	2.691	0.01

 $\textbf{Table E.19.} \ \textit{Causal Attributions Mediating Restorative Support in Study 3}$

	Estimate	95% CI Lower	95% CI Upper	p-value
ACME	0.110	0.066	0.156	0.00
ADE	-0.009	-0.083	0.065	0.79
Total Effect	0.101	0.016	0.185	0.02
Prop. Mediated	1.087	0.568	3.707	0.02

Likelihood of Sharing the Material Online

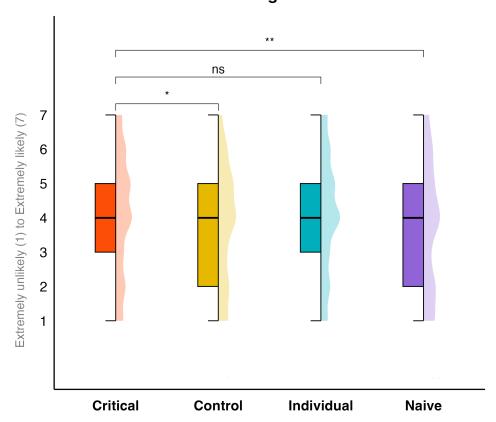


Figure E.3. Plot of Willingness to Share by Condition in Study 4

Appendix F

Ch.1 Study 4 Supplemental Information

 Table F.1. Descriptive Statistics of Main Dependent Variables in Study 4

	Total $(n = 1,472)$	Critical $(n = 380)$	Control $(n = 351)$	Individual $(n = 356)$	Naive $(n = 385)$	p
Punitive Policy Support	4.69 (1.51)	4.77 (1.54)	4.44 (1.42)	4.72 (1.52)	4.83 (1.52)	0.004
Punitive Policy Support (after 1 week)	4.71 (1.44)	4.73 (1.48)	4.63 (1.40)	4.71 (1.44)	4.79 (1.45)	0.499
Restorative Policy Support	5.82 (1.09)	5.74 (1.18)	5.90 (1.03)	5.82 (1.13)	5.84 (1.01)	0.229
Restorative Policy Support (after 1 week)	5.55 (1.05)	5.57 (1.07)	5.54 (1.07)	5.48 (1.06)	5.58 (1.02)	0.528
Willingness to share memo with friends	3.90 (1.77)	3.78 (1.69)	4.12 (1.78)	4.08 (1.72)	3.65 (1.84)	< 0.001

Note. Values represent the mean and standard deviation.

Table F.2. Descriptive Statistics and Correlations of Main Dependent Variables in Study 4

Variable	N	М	SD	1	2	3	4
1. punitive	1472	4.69	1.51				
2. punitive2	1471	4.71	1.44	.80**			
3. restorative	1471	5.82	1.09	22**	29**		
4. restorative2	1471	5.55	1.05	34**	30**	.66**	
5. share	1469	3.90	1.77	02	01	.25**	.28**

Note. M = mean. SD = standard deviation. Square brackets = 95% confidence interval.

^{*} indicates p < .05. ** indicates p < .01.

Table F.3. Punitive Policy Support by Condition in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.98	1	0.98	1.32	.251		
Condition	6.97	3	2.32	3.14	.025	.01	[.00, .02]
Political Orientation	258.27	1	258.27	349.14	<.001	.19	[.16, .23]
Female	0.04	1	0.04	0.05	.828	.00	[.00, .00]
Racial/ethnic Identity	11.12	3	3.71	5.01	.002	.01	[.00, .02]
Age	20.04	1	20.04	27.09	<.001	.02	[.01, .03]
Education	28.41	2	14.21	19.20	<.001	.03	[.01, .04]
Adj. Income	4.79	1	4.79	6.48	.011	.00	[.00, .01]
Error	1067.44	1443	0.74				

Table F.4. Post-hoc Comparisons of Punitive Policy Support by Condition in Study 4

Contrast	Est.	SE	df	t	p
Critical - Control	0.174	0.064	1443	2.712	0.019
Critical - Individual	0.039	0.064	1443	0.603	0.880
Critical - Naive	0.007	0.063	1443	0.114	0.999

Table F.5. Punitive Policy Support by Condition and Political Orientation in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	1.04	1	1.04	1.40	.237		
Condition	7.39	3	2.46	3.33	.019	.01	[.00, .02]
Political Orientation	76.70	1	76.70	103.60	<.001	.07	[.04, .09]
Female	0.02	1	0.02	0.03	.862	.00	[.00, .00]
Racial/ethnic Identity	11.17	3	3.72	5.03	.002	.01	[.00, .02]
Age	20.33	1	20.33	27.46	<.001	.02	[.01, .03]
Education	28.44	2	14.22	19.21	<.001	.03	[.01, .04]
Adj. Income	4.79	1	4.79	6.47	.011	.00	[.00, .01]
Condition x Political	1.37	3	0.46	0.61	.606	.00	[.00, .01]
Error	1066.08	1440	0.74				

Table F.6. Post-hoc Comparisons of Punitive Policy Support by Condition and Political Orientation in Study 4

Contrast	b	SE	df	t	p
Political Liberals					
Critical - Control	0.039	0.130	1436	0.305	0.982
Critical - Individual	-0.018	0.132	1436	-0.137	0.998
Critical - Naive	-0.078	0.132	1436	-0.587	0.889
Political Moderates					
Critical - Control	0.240	0.090	1436	2.658	0.022
Critical - Individual	0.056	0.093	1436	0.603	0.879
Critical - Naive	0.075	0.090	1436	0.831	0.744
Political Conservatives					
Critical - Control	0.208	0.132	1436	1.573	0.270
Critical - Individual	0.069	0.121	1436	0.571	0.895
Critical - Naive	-0.044	0.120	1436	-0.370	0.967

Table F.7. Restorative Policy Support by Condition in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	6.33	1	6.33	7.18	.007		
Condition	5.31	3	1.77	2.01	.111	.00	[.00, .01]
Political Orientation	148.20	1	148.20	168.17	<.001	.10	[.08, .13]
Female	4.81	1	4.81	5.46	.020	.00	[.00, .01]
Racial/ethnic Identity	3.43	3	1.14	1.30	.273	.00	[.00, .01]
Age	2.07	1	2.07	2.35	.125	.00	[.00, .01]
Education	5.60	2	2.80	3.17	.042	.00	[.00, .01]
Adj. Income	0.06	1	0.06	0.06	.801	.00	[.00, .00]
Error	1271.68	1443	0.88				

Table F.8. Post-hoc Comparisons of Restorative Policy Support by Condition in Study 4

Contrast	Est.	SE	df	t	p
Critical - Control	-0.164	0.075	1443	-0.311	-0.017
Critical - Individual	-0.107	0.074	1443	-0.253	0.039
Critical - Naive	-0.148	0.073	1443	-0.292	-0.005

Table F.9. Restorative Policy Support by Condition and Political Orientation in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	6.22	1	6.22	7.05	.008		
Condition	5.17	3	1.72	1.96	.119	.00	[.00, .01]
Political Orientation	41.83	1	41.83	47.43	<.001	.03	[.02, .05]
Female	4.53	1	4.53	5.13	.024	.00	[.00, .01]
Racial/ethnic Identity	3.58	3	1.19	1.35	.255	.00	[.00, .01]
Age	2.19	1	2.19	2.49	.115	.00	[.00, .01]
Education	5.71	2	2.85	3.24	.040	.00	[.00, .01]
Adj. Income	0.05	1	0.05	0.05	.819	.00	[.00, .00]
Condition x Political	1.68	3	0.56	0.63	.594	.00	[.00, .01]
Error	1270.00	1440	0.88				

Table F.10. Post-hoc Comparisons of Restorative Policy Support by Condition and Political Orientation in Study 4

Contrasts	Est.	SE	df	t	p
Political Liberals					
Critical - Control	-0.233	0.141	1436	-1.654	0.236
Critical - Individual	-0.148	0.143	1436	-1.034	0.606
Critical - Naive	-0.210	0.143	1436	-1.463	0.330
Political Moderates					
Critical - Control	-0.143	0.098	1436	-1.462	0.328
Critical - Individual	0.009	0.101	1436	0.085	1.000
Critical - Naive	-0.060	0.097	1436	-0.620	0.871
Political Conservatives					
Critical - Control	-0.097	0.144	1436	-0.678	0.838
Critical - Individual	-0.252	0.131	1436	-1.929	0.135
Critical - Naive	-0.218	0.130	1436	-1.678	0.223

 Table F.11. Punitive Policy Support at Time 2 by Condition in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.10	1	0.10	0.14	.713		
Condition	0.15	3	0.05	0.07	.975	.00	[.00, 1.00]
Political Orientation	254.40	1	254.40	355.93	<.001	.20	[.16, .23]
Female	0.13	1	0.13	0.18	.675	.00	[.00, .00]
Racial/ethnic Identity	17.01	3	5.67	7.93	<.001	.02	[.00, .03]
Age	59.79	1	59.79	83.66	<.001	.05	[.03, .08]
Education	31.14	2	15.57	21.78	<.001	.03	[.01, .05]
Adj. Income	5.44	1	5.44	7.62	.006	.01	[.00, .02]
Error	1030.65	1442	0.71				

Table F.12. Restorative Policy Support at Time 2 by Condition in Study 4

Predictor	SS	df	MS	F	p	$\eta^2_{partial}$	95% CI
(Intercept)	0.20	1	0.20	0.25	.620		
Condition	3.04	3	1.01	1.28	.281	.00	[.00, .01]
Political Orientation	232.47	1	232.47	292.84	<.001	.17	[.14, .20]
Female	9.13	1	9.13	11.50	.001	.01	[.00, .02]
Racial/ethnic Identity	18.24	3	6.08	7.66	<.001	.02	[.00, .03]
Age	0.02	1	0.02	0.03	.861	.00	[.00, .00]
Education	0.62	2	0.31	0.39	.675	.00	[.00, .00]
Adj. Income	10.83	1	10.83	13.65	<.001	.01	[.00, .02]
Error	1144.70	1442	0.79				

Table F.13. Post-hoc Comparisons of Restorative Policy Support at Time 2 by Condition and Political Orientation in Study 4

Contrasts	Est.	SE	df	t	р
Political Liberals					
Critical - Control	0.045	0.134	1435	0.334	0.976
Critical - Individual	0.083	0.136	1435	0.611	0.878
Critical - Naive	-0.126	0.137	1435	-0.921	0.686
Political Moderates					
Critical - Control	0.019	0.094	1435	0.206	0.994
Critical - Individual	0.108	0.097	1435	1.110	0.550
Critical - Naive	0.031	0.093	1435	0.332	0.976
Political Conservatives					
Critical - Control	0.106	0.137	1435	0.775	0.779
Critical - Individual	-0.011	0.125	1435	-0.091	0.999
Critical - Naive	-0.114	0.124	1435	-0.922	0.680

Table F.14. Willingness to Share by Condition in Study 4.

Term	SS	df	Statistic	p
(Intercept)	3090.640	1	1068.410	0.000
Condition	38.979	3	4.492	0.004
Political orientation	98.724	1	34.128	0.000
Female	34.812	1	12.034	0.001
Racial/ethnic identity	101.318	5	7.005	0.000
Age	41.780	1	14.443	0.000
Education	30.766	1	10.635	0.001
Adj. Income	34.468	1	11.915	0.001
Residuals	4984.203	1723	NA	NA

Table F.15. Post-hoc Comparisons of Willingness to Share by Condition in Study 4.

Contrast	Est.	SE	df	CI Low	CI High	t	p
Critical - Control	0.244	0.116	1723	0.016	0.473	2.101	0.036
Critical - Individual	-0.056	0.118	1723	-0.288	0.176	-0.471	0.637
Critical - Naive	0.292	0.116	1723	0.064	0.519	2.512	0.012

Table F.16. Willingness to Share Memo by Condition and Political Orientation in Study 4.

Term	SS	df	F	p
(Intercept)	1674.575	1	581.782	0.000
Condition	32.615	3	3.777	0.010
Political party	58.856	1	20.448	0.000
Female	32.376	1	11.248	0.001
Racial/ethnic identity	91.675	3	10.617	0.000
Age	42.496	1	14.764	0.000
Education	28.601	1	9.936	0.002
Adj. Income	32.624	1	11.334	0.001
Condition x Political	35.643	3	4.128	0.006
Residuals	4956.529	1722	NA	NA

Table F.17. Post-hoc Comparisons of Willingness to Share by Condition and Political Orientation in Study 4.

Political Liberals					
Contrasts	Est.	SE	df	t	p
Critical - Control	0.917	0.232	1703	3.946	0.000
Critical - Individual	0.465	0.242	1703	1.924	0.135
Critical - Naive	0.664	0.237	1703	2.805	0.014
Political Moderates					
Critical - Control	0.004	0.164	1703	0.024	1.000
Critical - Individual	-0.167	0.168	1703	-0.994	0.629
Critical - Naive	0.101	0.165	1703	0.610	0.874
Political Conservatives					
Contrasts	Est.	SE	df	t	p
Critical - Control	0.052	0.235	1703	0.222	0.992
Critical - Individual	-0.311	0.232	1703	-1.341	0.385
Critical - Naive	0.299	0.229	1703	1.307	0.405

Appendix G

Ch 2. Study 2 Supplemental Information

Table G.1. Descriptive Statistics and Correlations of Construal Items in the Combined Pilot RCT Sample

Variable	N	М	SD	1	2	3	4	5	6	7
1. gunid	200	2.63	0.99							
2. gunapp	200	3.24	1.05	53**						
3. gunauto	200	3.10	1.15	48**	.92**					
4. gunprosoc	200	3.38	1.13	49**	.92**	.70**				
5. actid	200	3.35	0.93	36**	.47**	.41**	.45**			
6. actapp	200	4.06	0.87	28**	.52**	.44**	.53**	.45**		
7. actauto	200	3.97	0.94	29**	.55**	.47**	.54**	.45**	.95**	
8. actprosoc	200	4.15	0.90	23**	.44**	.35**	.46**	.40**	.94**	.78**

Note. N = number of cases. M = mean. SD = standard deviation.

^{*} indicates p < .05. ** indicates p < .01.

Table G.2. Mean Differences in Construals of Guns and Activism by Condition in the Combined Pilot RCT Sample

Dependent Variable	t	df	p	d	95% CI
Perceived Social Status of Guns	0.59	196.15	0.56	0.08	[-0.19, 0.36]
Appeal of Avoiding Guns	-2.33	197.50	0.02	-0.33	[-0.61, -0.05]
Asserting Autonomy	-2.42	198.00	0.02	-0.34	[-0.62, -0.06]
Prosocial Purpose	-1.87	197.85	0.06	-0.26	[-0.54, 0.01]
Perceived Social Status of Activism	-1.73	188.90	0.08	-0.25	[-0.52, 0.03]
Appeal of Activism	-3.34	197.91	0.00	-0.47	[-0.75, -0.19]
Asserting Autonomy	-3.35	197.94	0.00	-0.47	[-0.75, -0.19]
Prosocial Purpose	-2.92	197.74	0.00	-0.41	[-0.69, -0.13]

Table G.3. Mean Differences in Construals of Guns and Activism by Condition in the Combined Pilot RCT Sample

Dependent Variable	t	df	p	d	95% CI
Chicago					
Perceived Social Status of Guns	-1.38	80.83	0.17	-0.30	[-0.73, 0.14]
Appeal of Avoiding Guns	-1.02	80.96	0.31	-0.22	[-0.65, 0.21]
Asserting Autonomy	-0.88	80.94	0.38	-0.19	[-0.62, 0.24]
Prosocial Purpose	-0.98	80.95	0.33	-0.21	[-0.65, 0.22]
Perceived Social Status of Activism	-0.29	69.66	0.77	-0.07	[-0.50, 0.37]
Appeal of Activism	-1.23	81.00	0.22	-0.27	[-0.70, 0.17]
Asserting Autonomy	-1.09	80.97	0.28	-0.24	[-0.67, 0.20]
Prosocial Purpose	-1.20	80.85	0.23	-0.26	[-0.69, 0.17]
El Paso					
Perceived Social Status of Guns	1.45	104.70	0.15	0.27	[-0.09, 0.63]
Appeal of Avoiding Guns	-2.15	114.52	0.03	-0.40	[-0.76, -0.03]
Asserting Autonomy	-2.38	114.99	0.02	-0.44	[-0.81, -0.07]
Prosocial Purpose	-1.61	114.93	0.11	-0.30	[-0.66, 0.07]
Perceived Social Status of Activism	-1.91	114.60	0.06	-0.35	[-0.72, 0.01]
Appeal of Activism	-3.30	114.96	0.00	-0.61	[-0.98, -0.24]
Asserting Autonomy	-3.55	114.90	0.00	-0.66	[-1.03, -0.28]
Prosocial Purpose	-2.73	114.59	0.01	-0.50	[-0.87, -0.14]

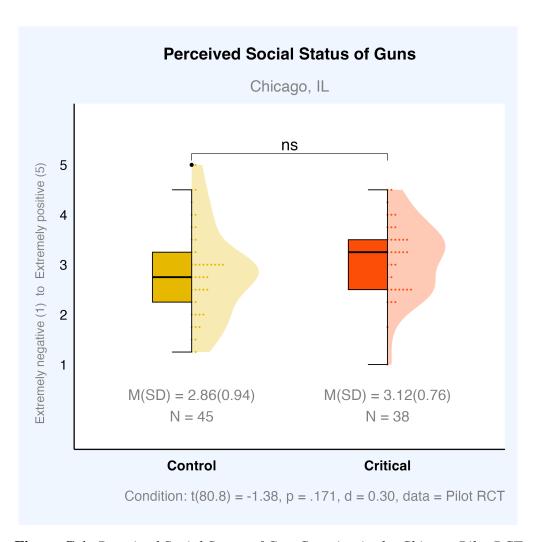


Figure G.1. Perceived Social Status of Gun Carrying in the Chicago Pilot RCT

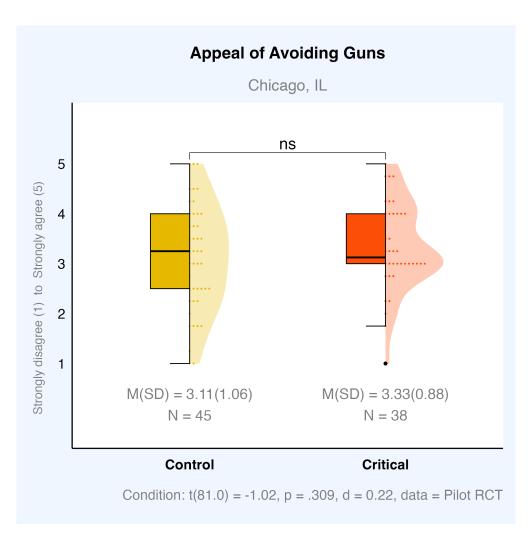


Figure G.2. Appeal of Gun Carrying in the Chicago Pilot RCT

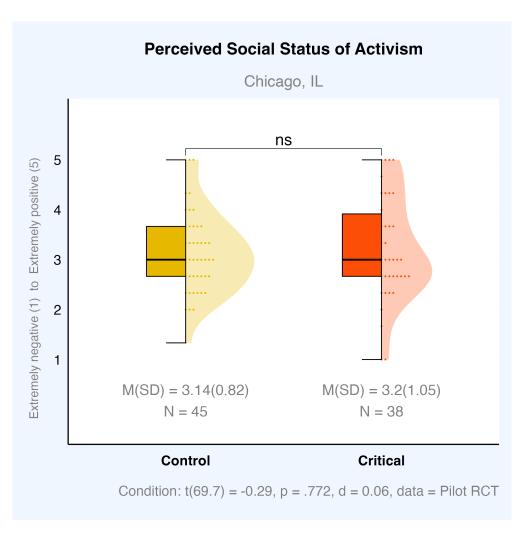


Figure G.3. Perceived Social Status of Activism in the Chicago Pilot RCT

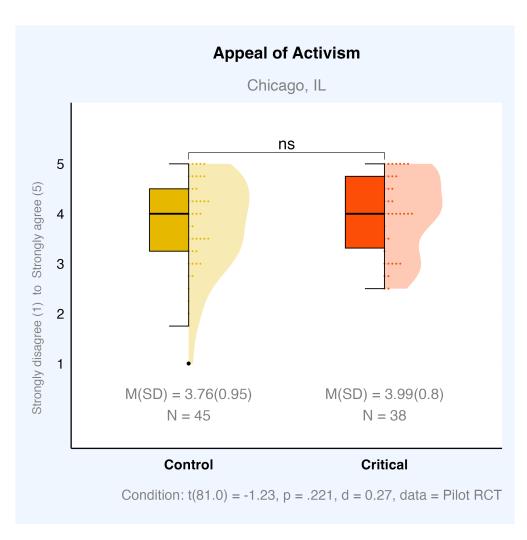


Figure G.4. Appeal of Activism in the Chicago Pilot RCT

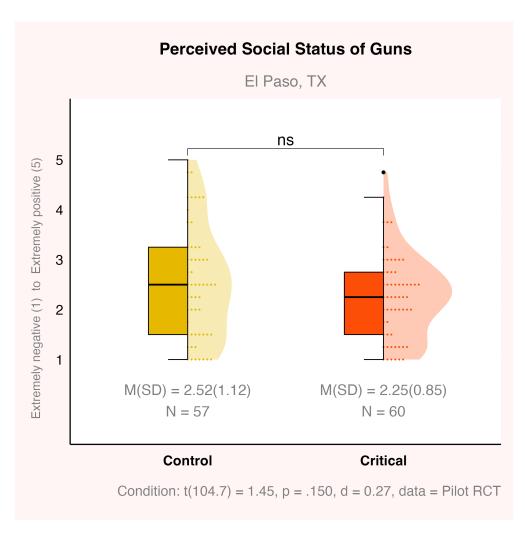


Figure G.5. Perceived Social Status of Gun Carrying in the El Paso Pilot RCT

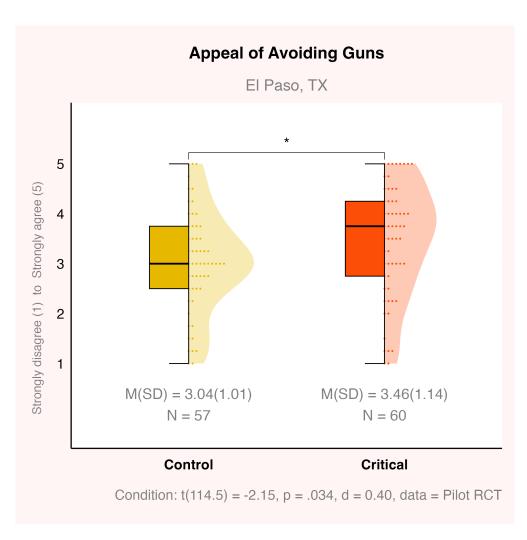


Figure G.6. Appeal of Gun Carrying in the El Paso Pilot RCT

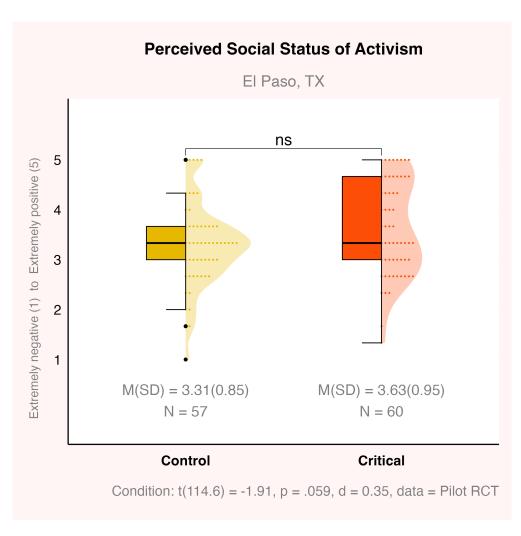


Figure G.7. Perceived Social Status of Activism in the El Paso Pilot RCT

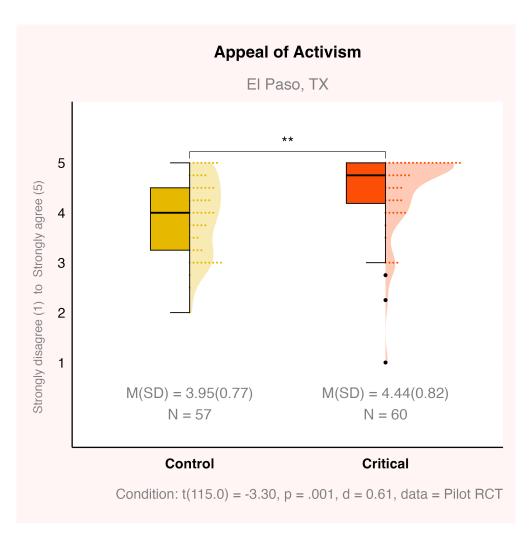


Figure G.8. Appeal of Activism in the El Paso Pilot RCT

References

- Alexander, M. (2010). The New Jim Crow: Mass Incarceration in the Age of Colorblindness.
- Apfelbaum, E. P., Norton, M. I., & Sommers, S. R. (2012). Racial Color Blindness. *Current Directions in Psychological Science*, 21(3), 205–209.

https://doi.org/10.1177/0963721411434980

- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet*, 389(10077), 1453–1463. https://doi.org/10.1016/S0140-6736(17)30569-X
- Banaji, M. R., Fiske, S. T., & Massey, D. S. (2021). Systemic racism: individuals and interactions, institutions and society. *Cognitive Research: Principles and Implications*, 6(1), 82. https://doi.org/10.1186/s41235-021-00349-3
- Barry, C. L., Brescoll, V. L., & Gollust, S. E. (2013). Framing Childhood Obesity: How Individualizing the Problem Affects Public Support for Prevention. *Political Psychology*, 34(3), 327–349. https://doi.org/10.1111/pops.12018
- Bieler, S., Kijakazi, K., La Vigne, N., Vinik, N., & Overton, S. (2016). Engaging Communities in Reducing Gun Violence A Road Map for Safer Communities. April, 1-67. http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000760-Engaging-Communities-in-Reducing-Gun-Violence-A-Road-Map-for-Safer-Communities.pdf
- Bjornstrom, E. E. S., Kaufman, R. L., Peterson, R. D., & Slater, M. D. (2010). Race and Ethnic Representations of Lawbreakers and Victims in Crime News: A National Study of Television Coverage. *Social Problems*, *57*(2), 269–293.

https://doi.org/10.1525/sp.2010.57.2.269

Bonam, C. M., Nair Das, V., Coleman, B. R., & Salter, P. (2019). Ignoring History, Denying Racism: Mounting Evidence for the Marley Hypothesis and Epistemologies of Ignorance. *Social Psychological and Personality Science*, *10*(2), 257–265.

https://doi.org/10.1177/1948550617751583

- Bonilla-Silva, E. (1997). Rethinking Racism: Toward a Structural Interpretation. *American Sociological Review*, 62(3), 465. https://doi.org/10.2307/2657316
- Bonilla-Silva, E. (2003). Racial attitudes or racial ideology? An alternative paradigm for examining actors' racial views. *Journal of Political Ideologies*, 8(1), 63–82. https://doi.org/10.1080/13569310306082
- Bonilla-Silva, E. (2015). The structure of racism in color-blind, "post-racial" America. *American Behavioral Scientist*, 59(11), 1358–1376. https://doi.org/10.1177/0002764215586826
- Bowleg, L., Boone, C. A., Holt, S. L., Río-González, A. M. del, & Mbaba, M. (2021). Beyond "Heartfelt Condolences": A Critical Take on Mainstream Psychology's Responses to Anti-Black Police Brutality. *American Psychologist*, 77(3), 362–380. https://doi.org/10.1037/amp0000899
- Braga, A. A., & Brunson, R. K. (2015). *The Police and Public Discourse on "Black-on-Black" Violence*. U.S. Department of Justice, National Institute of Justice. www.NIJ.gov,
- Braga, A. A., Weisburd, D., & Turchan, B. (2018). Focused Deterrence Strategies and Crime Control: An Updated Systematic Review and Meta-Analysis of the Empirical Evidence.

 *Criminology and Public Policy, 17(1), 205–250.

 https://doi.org/10.1111/1745-9133.12353
- Bridges, G. S., & Steen, S. (1998). Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms. *American Sociological Review*, 63(4), 554–570.
- Bronson, M. H., Cleary, M. J., & Hubbard, B. M. (2007). *Glencoe Teen Health Course 1*. Glencoe McGraw-Hill.
- Brown-Iannuzzi, J. L., Dotsch, R., Cooley, E., & Payne, B. K. (2017). The Relationship Between Mental Representations of Welfare Recipients and Attitudes Toward Welfare. *Psychological Science*, 28(1), 92–103. https://doi.org/10.1177/0956797616674999

Bryan, C. J., Yeager, D. S., & Hinojosa, C. P. (2019). A values-alignment intervention protects adolescents from the effects of food marketing. *Nature Human Behaviour*. https://doi.org/10.1038/s41562-019-0586-6

Bryan, C. J., Yeager, D. S., Hinojosa, C. P., Chabot, A. M., Bergen, H., Kawamura, M., & Steubing, F. (2016). Sticking it to the man: Harnessing adolescent values to motivate healthier eating. *Proceedings of the National Academy of Sciences*, 113(39), 1–27. https://doi.org/10.1073/pnas.1604586113

CDC. (2021). National Vital Statistics System, Mortality 1999-2020 on CDC WONDER Online

Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as

compiled from data provided by the 57 vital statistics jurisdictions through the Vital St.

http://wonder.cdc.gov/ucd-icd10.html

Cheon, C., Lin, Y., Harding, D. J., Wang, W., & Small, D. S. (2020). Neighborhood Racial Composition and Gun Homicides. *JAMA Network Open*, 3(11), e2027591. https://doi.org/10.1001/jamanetworkopen.2020.27591

Cimpian, A., & Salomon, E. (2014). The inherence heuristic: An intuitive means of making sense of the world, and a potential precursor to psychological essentialism. *Behavioral and Brain Sciences*, 37(05), 461–480. https://doi.org/10.1017/S0140525X13002197

Coates, T.-N. (2014). The case for reparations.

Coates, T.-N. (2019). Ta-nehisi coates revisits the case for reparations. *The New Yorker*.

Collins, P. H. (2019a). *Intersectionality as Critical Social Theory*. Duke University Press. https://doi.org/10.2307/j.ctv11hpkdj

- Collins, P. H. (2019b). The Difference That Power Makes: Intersectionality and Participatory Democracy. *The Palgrave Handbook of Intersectionality in Public Policy*, 8(1), 167–192. https://doi.org/10.1007/978-3-319-98473-5_7
- Cook, P. J., & Ludwig, J. (2019). Understanding gun violence: Public health vs. public policy. *Journal of Policy Analysis and Management*, 38(3), 788–795.

```
https://doi.org/10.1002/pam.22141
```

- Crenshaw, K., Gotanda, N., Peller, G., & Thomas, K. (1995). *Critical Race Theory: The Key Writings That Formed the Movement* (K. Crenshaw, N. Gotanda, G. Peller, & K. Thomas, Eds.). The New Press.
- Crenshaw, K., Stanford, S., Review, L., & Jul, N. (2016). Stanford Law Review Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color Linked references are available on JSTOR for this article: Mapping the Margins: Intersectionality, Identity Politics, and Violence Ag. *Stanford Law Review*, 43(6), 1241–1299. https://www.scopus.com/record/display.uri?eid=2-s2.0-84926443235&origin=inward&txGid=FE9082C8BF76CA5D0B9B1AAD235670AA.wsnAw8kcdt7IPYL00V48gA:1
- Crossing, A. E., Gumudavelly, D., Watkins, N., Logue, C., & Anderson, R. E. (2022). A Critical Race Theory of Psychology as Praxis: Proposing and Utilizing Principles of PsyCrit. *Journal of Adolescent Research*, 074355842211019.

https://doi.org/10.1177/07435584221101930

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map. Advances in Experimental Social Psychology, 40(07), 61–149.

https://doi.org/10.1016/S0065-2601(07)00002-0

- Dahl, R. E., Allen, N. B., Wilbrecht, L., & Suleiman, A. B. (2018). Importance of investing in adolescence from a developmental science perspective. *Nature*, *554*(7693), 441–450. https://doi.org/10.1038/nature25770
- Damon, W., Menon, J., Bronk, K. C., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied Developmental Science*, 7(3), 119–128. https://doi.org/10.1016/j.jvolgeores.2005.09.025
- David-Ferdon, C., Vivolo-Kantor, A. M., Dahlberg, L. L., Marshall, K., Rainford, N., & Hall, J. (2016). A Comprehensive Technical Package for the Prevention of Youth Violence and

- Associated Risk Behaviors. National Center for Injury Prevention; Control, Centers for Disease Control; Prevention. https://stacks.cdc.gov/view/cdc/43085%0Ahttps://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf
- Delgado, R., & Stefancic, J. (1992). Images of the Outsider in American Law and Culture: Can Free Expression Remedy Systemic Social Ills. *Cornell Law Review*, 77(6).
- Delgado, R., & Stefancic, J. (2017). *Critical Race Theory: An Introduction*. New York University Press.
- Diemer, M. A., & Blustein, D. L. (2006). Critical consciousness and career development among urban youth. *Journal of Vocational Behavior*, 68(2), 220–232. https://doi.org/10.1016/j.jvb.2005.07.001
- Diemer, M. A., & Hsieh, C. A. (2008). Sociopolitical development and vocational expectations among lower socioeconomic status adolescents of color. *Career Development Quarterly*, 56(3), 257–267. https://doi.org/10.1002/j.2161-0045.2008.tb00040.x
- Diemer, M. A., Rapa, L. J., Voight, A. M., & McWhirter, E. H. (2016). Critical Consciousness: A Developmental Approach to Addressing Marginalization and Oppression. *Child Development Perspectives*, 10(4), 216–221. https://doi.org/10.1111/cdep.12193
- Dixon, T. L., & Linz, D. (2000). Race and the misrepresentation of victimization on local television news. *Communication Research*, 27(5), 547–573. https://doi.org/10.1177/009365000027005001
- Druckman, J. N. (2001). The Implications of Framing Effects for Citizen Competence. *Political Behavior*, 23(3), 225–256. https://doi.org/10.1023/A:1015006907312
- Dunbar, A. (2020). Follow the Money: Racial Crime Stereotypes and Willingness to Fund Crime Control Policies. *Psychology, Public Policy, and Law*, 26(4), 476–489. https://doi.org/10.1037/law0000234
- Dupree, C. H., & Kraus, M. W. (2021). Psychological Science Is Not Race Neutral. *Perspectives on Psychological Science*. https://doi.org/10.1177/1745691620979820

- DuRant, R. H., Krowchuk, D. P., Kreiter, S., Sinal, S. H., & Woods, C. R. (1999). Weapon Carrying on School Property Among Middle School Students. *Archives of Pediatrics & Adolescent Medicine*, 153(1), 21–26. https://doi.org/10.1001/archpedi.153.1.21
- Edley, C., Ruiz de Velasco, J., Edley Jr, C., & Ruiz de Velasco, J. (2008). Changing places: How communities will improve the health of boys of color. *Review Literature And Arts Of The Americas*, 1–614. https://doi.org/10.1038/nbt839
- Fiske, S. T., Kenny, D. A., & Taylor, S. E. (1982). Structural models for the mediation of salience effects on attribution. *Journal of Experimental Social Psychology*, *18*(2), 105–127. https://doi.org/10.1016/0022-1031(82)90046-4
- Fontaine, J., La Vigne, N., Leitson, D., Erondu, N., Okeke, C., & Dwivedi, A. (2018). "We Carry Guns to Stay Safe": Perspectives on guns and gun violence from young adults living in Chicago's West and South sides (pp. 1–14). The Urban Institute. https://www.urban.org/sites/default/files/publication/99091/we_carry_guns_to_stay_safe_1.pdf
- Frazer, E., Mitchell, R. A., Nesbitt, L. Q. S., Williams, M., Mitchell, E. P., Williams, R. A., & Browne, D. (2017). The violence epidemic in the African American community: A call by the National Medical Association for comprehensive reform. *Journal of the National Medical Association*, 110(1), 4–15. https://doi.org/10.1016/j.jnma.2017.08.009
- Freire, P. (1970). *Pedagogy of the Oppressed* (pp. 1–183). Continuum.
- Freire, P. (1974). *Education for Critical Consciousness*. Continuum. https://doi.org/10.1177/074171367402400405
- Futterman, C. B., Hunt, C., & Kalven, J. (2016). 'They Have All the Power': Youth/Police Encounters on Chicago's South Side. The University of Chicago Law School.
- Galatzer-Levy, R. M., & Cohler, Bertram, J. (1993). Adolescence and Youth. In *The essential other: A developmental psychology of the self* (pp. 166–196). Basic Books.
- Gallup, Jones, J., & Saad, L. (2019). *Gallup News Service August Wave* 2 (pp. 1–4). Gallup. https://news.gallup.com/poll/266750/blaming-extremism-heated-rhetoric-m

```
ass-shootings.aspx
```

- Gawronski, B. (2004). Theory-based bias correction in dispositional inference: The fundamental attribution error is dead, long live the correspondence bias. *European Review of Social Psychology*, *15*(1), 183–217. https://doi.org/10.1080/10463280440000026
- Gee, H. (2022). Reducing Gun Violence with ShotSpotter Gunshot Detection Technology and Community-Based Plans: What Works? *Oregon Law Review*, 100(2019), 461–500. https://scholarsbank.uoregon.edu/xmlui/handle/1794/27170
- Geronimus, A. T. (2000). To mitigate, resist, or undo: Addressing structural influences on the health of urban populations. *American Journal of Public Health*, *90*(6), 867–872. https://doi.org/10.2105/AJPH.90.6.867
- Gilbert, D. T., Malone, P. S., Daniel Gilbert, & Patrick Malone. (1995). The Correspondence Bias. *Psychological Bulletin*, 117(1), 21–38. https://doi.org/10.1037/0033-2909.117.1.21
- Gilens, M. (1996a). "Race Coding" and White Opposition to Welfare. *The American Political Science Review*, 90(3), 593–604. http://www.jstor.org/stable/2082611
- Gilens, M. (1996b). Race and poverty in America: Public misperceptions and the American news media. *Public Opinion Quarterly*, 60, 515–541.
- Gilens, M. (1999). Review: Why Americans Hate Welfare (pp. 46–48). University of Chicago Press. https://doi.org/10.7208/chicago/9780226293660.001.0001
- Gkiouleka, A., Huijts, T., Beckfield, J., & Bambra, C. (2018). Understanding the micro and macro politics of health: Inequalities, intersectionality & institutions A research agenda. *Social Science & Medicine*, 200, 92–98.

https://doi.org/10.1016/J.SOCSCIMED.2018.01.025

- Glencoe. (2005). *Health*. Glencoe McGraw-Hill.
- Goldstick, J. E., Carter, P. M., & Cunningham, R. M. (2021). Current Epidemiological Trends in Firearm Mortality in the United States. *JAMA Psychiatry*, 78(3), 241.

- https://doi.org/10.1001/jamapsychiatry.2020.2986
- Goldstick, J. E., Cunningham, R. M., & Carter, P. M. (2022). Current Causes of Death in Children and Adolescents in the United States. *New England Journal of Medicine*, 386(20), 1955–1956. https://doi.org/10.1056/nejmc2201761
- Graham, L., Brown-Jeffy, S., Aronson, R., & Stephens, C. (2011). Critical race theory as theoretical framework and analysis tool for population health research. *Critical Public Health*, 21(1), 81–93. https://doi.org/10.1080/09581596.2010.493173
- Green, E. G. T., Staerklé, C., & Sears, D. O. (2006). Symbolic racism and Whites' attitudes towards punitive and preventive crime policies. *Law and Human Behavior*, 30(4), 435–454. https://doi.org/10.1007/s10979-006-9020-5
- Haider-Markel, D. P., & Joslyn, M. R. (2001). Gun policy, opinion, tragedy, and blame attribution: The conditional influence of issue frames. *Journal of Politics*, 63(2), 520–543. https://doi.org/10.1111/0022-3816.00077
- Haider-Markel, D. P., Joslyn, M. R., Ahmed, R., & Badran, S. (2018). Looters or political protesters? Attributions for civil unrest in American cities. *Social Science Research*, 75, 168–178. https://doi.org/10.1016/j.ssresearch.2018.07.002
- Hannah, G., & Cafferty, T. P. (2006). Attribute and responsibility framing effects in television news coverage of poverty. *Journal of Applied Social Psychology*, *36*(12), 2993–3014. https://doi.org/10.1111/j.0021-9029.2006.00139.x
- Hardy, M. S. (2002). Behavior-oriented approaches to reducing youth gun violence. *The Future of Children*, *12*(2), 100–117. http://www.jstor.org/stable/1602741
- Heath, D. (2020). Upstream: The quest to solve problems before they happen. Avid Reader Press.
- Hetey, R. C., & Eberhardt, J. L. (2014). Racial Disparities in Incarceration Increase Acceptance of Punitive Policies. *Psychological Science*, 25(10), 1949–1954.
 - https://doi.org/10.1177/0956797614540307

Hetey, R. C., & Eberhardt, J. L. (2018). The numbers don't speak for themselves: Racial disparities and the persistence of inequality in the criminal justice system. *Current Directions in Psychological Science*, 27(3), 183–187.

https://doi.org/10.1177/0963721418763931

- Hetherington, M. J., & Rudolph, T. J. (2015). Why washington won't work. University of Chicago Press.
- Hope, E. C. (2016). Preparing to participate: The role of youth social responsibility and political efficacy on civic engagement for Black early adolescents. *Child Indicators Research*, *9*(3), 609–630. https://doi.org/10.1007/s12187-015-9331-5
- Hurwitz, J., & Peffley, M. (1997). Public Perceptions of Race and Crime: The Role of Racial Stereotypes. *American Journal of Political Science*, 41(2), 375.

https://doi.org/10.2307/2111769

- Hurwitz, J., & Peffley, M. (2005). Playing the race card in the post-Willie Horton era The impact of racialized code words on support for punitive crime policy. *Public Opinion Quarterly*, 69(1), 99–112. https://doi.org/10.1093/poq/nfi004
- IDEO. (2011). Design Thinking for Educators. April.

http://designthinkingforeducators.com/

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. University of Chicago Press.

https://www.press.uchicago.edu/ucp/books/book/chicago/I/bo3684515.html

- Jones, E. E., & Harris, V. A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3(1), 1–24. https://doi.org/10.1016/0022-1031(67)90034-0
- 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. (2019). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology*, 58(2), 263–314.

```
https://doi.org/10.1111/bjso.12297
```

Kenny, M. E., Blustein, D. L., Gutowski, E., & Meerkins, T. (2018). *Combatting Marginalization and Fostering Critical Consciousness for Decent Work* (pp. 55–73).

```
https://doi.org/10.1007/978-3-319-91968-3_4
```

- Kim, S.-H. (2015). Who Is Responsible for a Social Problem? News Framing and Attribution of Responsibility. *Journalism & Mass Communication Quarterly*, 92(3), 554–558. https://doi.org/10.1177/1077699015591956
- Knopov, A., Rothman, E. F., Cronin, S. W., Franklin, L., Cansever, A., Potter, F., Mesic, A.,
 Sharma, A., Xuan, Z., Siegel, M., & Hemenway, D. (2019). The Role of Racial Residential
 Segregation in Black-White Disparities in Firearm Homicide at the State Level in the United
 States, 1991-2015. *Journal of the National Medical Association*, 111(1), 62–75.
 https://doi.org/10.1016/j.jnma.2018.06.002
- Kovera, M. B. (2019). Racial Disparities in the Criminal Justice System: Prevalence, Causes, and a Search for Solutions. *Journal of Social Issues*, 75(4), 1139–1164. https://doi.org/10.1111/josi.12355
- Kraus, M. W., Onyeador, I. N., Daumeyer, N. M., Rucker, J. M., & Richeson, J. A. (2019). *The Misperception of Racial Economic Inequality* (pp. 1–64) [PhD thesis].
- Ladson-Billings, G. (1995). Toward a Theory of Culturally-Relevant Pedagogy. *American Educational Research Journal*, 32(3), 465–491. http://www.jstor.org/stable/1163320
- Lawrence, K. O., Kubisch, A., Susi, G., Tucker, S., & Cadora, E. (2008). Rethinking Crime and Punishment for the 21 st Century: Can we develop a criminal justice paradigm that advances racial equity and democracy?
- Lewin, K. (1958). Group decision and social change. In E. E. Maccoby, T. M. Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology* (3rd ed., pp. 197–211). Holt, Rinehart; Winston.

- Lewin, K., & Iowa Child Welfare Research Station. (1937). The position of the construct of force in psychology. In *The conceptual representation and measurement of psychological forces* (pp. 11–19). Duke University Press.
- Lozada, F., Jagers, R. J., Smith, C., Bañales, J., & Hope, E. C. (2016). Prosocial behaviors of Black adolescent boys: An application of a Sociopolitical Development Theory. *Journal of Black Psychology*, 1–24. https://doi.org/10.1177/0095798416652021
- Lu, Y., & Temple, J. R. (2019). Dangerous weapons or dangerous people? The temporal associations between gun violence and mental health. *Preventive Medicine*, *121*(August 2018), 1–6. https://doi.org/10.1016/j.ypmed.2019.01.008
- Ludwig, J., & Shah, A. (2014). Think Before You Act: A New Approach to Preventing Youth Violence and Dropout (May).
- Lynch, J. P. (1997). Did Getting Tough on Crime Pay?: Crime Policy Report No. 1. *Urban Institute*, 1995(1). http://www.urban.org/publications/307337.html
- Lynn, M., & Dixson, A. D. (2013). *Handbook of Critical Race Theory in Education* (pp. 1–407). Routledge. https://doi.org/10.4324/9780203155721
- Massey, D. S. (1993). The Failure of Public Policy. In *American apartheid: Segregation and the making of the underclass*. Harvard University Press.
- Massey, D. S. (2020). Still the Linchpin: Segregation and Stratification in the USA. *Race and Social Problems*, *12*(1), 1–12. https://doi.org/10.1007/s12552-019-09280-1
- McGinty, E. E., Webster, D. W., Jarlenski, M., & Barry, C. L. (2014). News media framing of serious mental illness and gun violence in the United States, 1997-2012. *American Journal of Public Health*, 104(3), 406–413. https://doi.org/10.2105/AJPH.2013.301557
- Metzl, J. M., & Petty, J. (2017). Integrating and Assessing Structural Competency in an Innovative Prehealth Curriculum at Vanderbilt University. *Academic Medicine*, 92(3), 354–359. https://doi.org/10.1097/ACM.000000000001477

- Metzl, J. M., Petty, J. L., & Olowojoba, O. V. (2018). Using a structural competency framework to teach structural racism in pre-health education. *Social Science and Medicine*, 199, 189–201. https://doi.org/10.1016/j.socscimed.2017.06.029
- Miller, R. J. (2022). The Afterlife of Mass Incarceration, or What Does It Mean to Need a "Brute" in the Twenty-First Century? *Social Service Review*, *96*(2), 163–168. https://doi.org/10.1086/720275
- National Research Council. (2014). *The growth of incarceration in the United States: Exploring causes and consequences* (J. Travis, B. Western, & F. S. Redburn, Eds.; pp. 1–444).

 Committee on Law; Justice, Division of Behavioral; Social Sciences; Education; The National Academies Press.
- Nelson, J. C., Adams, G., & Salter, P. S. (2013). The Marley Hypothesis: Denial of Racism Reflects Ignorance of History. *Psychological Science*, 24(2), 213–218. https://doi.org/10.1177/0956797612451466
- Oliver, M. B. (2003). African American men as "criminal and dangerous": Implications of media portrayals of crime on the "criminalization" of African American men. *Journal of African American Studies*, 7(2), 3–18. https://doi.org/10.1007/s12111-003-1006-5
- Onyeador, I. N., Daumeyer, N. M., Rucker, J. M., Duker, A., Kraus, M. W., & Richeson, J. A. (2020). Disrupting Beliefs in Racial Progress: Reminders of Persistent Racism Alter Perceptions of Past, But Not Current, Racial Economic Equality. *Personality and Social Psychology Bulletin*. https://doi.org/10.1177/0146167220942625
- Parham-Payne, W. (2014). The Role of the Media in the Disparate Response to Gun Violence in America. *Journal of Black Studies*, 45(8), 752–768. https://doi.org/10.1177/0021934714555185
- Payne, B. K., Vuletich, H. A., & Lundberg, K. B. (2017). The Bias of Crowds: How Implicit Bias Bridges Personal and Systemic Prejudice. *Psychological Inquiry*, 28(4), 233–248. https://doi.org/10.1080/1047840X.2017.1335568

- Perez, M. J., & Salter, P. S. (2019). Trust, Innocence, and Individual Responsibility: Neoliberal Dreams of a Colorblind Peace. *Journal of Social Issues*, 75(1), 267–285. https://doi.org/10.1111/josi.12317
- Pew Research Center. (2014). Political Polarization in the American Public. Pew Research

 Center. https://www.pewresearch.org/wp-content/uploads/sites/4/2014/06/6-1

 2-2014-Political-Polarization-Release.pdf
- Pew Research Center. (2016). On views of race and inequality, Blacks and Whites are worlds apart. Pew Research Center.
- Pew Research Center. (2019). *Race in America 2019* (April). Pew Research Center. https://www.pewresearch.org/social-trends/2019/04/09/race-in-america-2019/
- Piff, P. K., Wiwad, D., Robinson, A. R., Aknin, L. B., Mercier, B., & Shariff, A. (2020). Shifting attributions for poverty motivates opposition to inequality and enhances egalitarianism. *Nature Human Behaviour*, 4(5), 496–505. https://doi.org/10.1038/s41562-020-0835-8
- Rapa, L. J., Diemer, M. A., & Bañales, J. (2018). Critical action as a pathway to social mobility among marginalized youth. *Developmental Psychology*, *54*(1), 127–137. https://doi.org/10.1037/dev0000414
- Roberts, S. O., & Rizzo, M. T. (2020). The Psychology of American Racism. *American Psychologist*. https://doi.org/10.1037/amp0000642
- Ross, L. (1977). The Intuitive Psychologist And His Shortcomings: Distortions in the Attribution Process. In *Advances in experimental social psychology* (Vol. 10, pp. 173–220). Elsevier. https://doi.org/10.1016/S0065-2601(08)60357-3
- Ross, L. D., & Nisbett, R. E. (1991). *Introduction* (pp. 1–13).
- Rothstein, R. (2017). The color of law: A forgotten history of how our government segregated america. Liveright Publishing.
- Rucker, J. M. (2020). Thinking Structurally: The Antecedents and Consequences of a Structural Understanding of Discrimination Julian. 4–5.

- https://arxiv.org/abs/arXiv:1011.1669v3
- Rucker, J. M., Duker, A., & Richeson, J. A. (2020). Structurally Unjust: How Lay Beliefs about Racism Relate to Perceptions of and Responses to Racial Inequality in Criminal Justice (pp. 1–51). Yale University.
- Rucker, J. M., & Richeson, J. A. (2021a). Beliefs About the Interpersonal vs. Structural Nature of Racism and Responses to Racial Inequality. In C. Tileagă, M. Augoustinos, & K. Durrheim (Eds.), *The routledge international handbook of discrimination, prejudice and stereotyping* (1st ed., pp. 13–25). Routledge. https://doi.org/10.4324/9780429274558-2
- Rucker, J. M., & Richeson, J. A. (2021b). Toward an understanding of structural racism: Implications for criminal justice. *Science*, *374*(6565), 286–290. https://doi.org/10.1126/science.abj7779
- Salter, P. S., & Adams, G. (2013). Toward a Critical Race Psychology. *Social and Personality Psychology Compass*, 7(11), 781–793. https://doi.org/10.1111/spc3.12068
- Salter, P. S., & Adams, G. (2016). On the Intentionality of Cultural Products: Representations of Black History As Psychological Affordances. *Frontiers in Psychology*, 7(AUG), 1–21. https://doi.org/10.3389/fpsyg.2016.01166
- Salter, P. S., Hirsch, K. A., Schlegel, R. J., & Thai, L. T. (2016). Who Needs Individual Responsibility? Audience Race and Message Content Influence Third-Party Evaluations of Political Messages. *Social Psychological and Personality Science*, 7(1), 29–36. https://doi.org/10.1177/1948550615590447
- Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "Neighborhood Effects": Social Processes and New Directions in Research. *Annual Review of Sociology*, 28(1), 443–478. https://doi.org/10.1146/annurev.soc.28.110601.141114
- Schutz, A. (2016). Home is a Prison in the Global City: The Tragic Failure of School-Based Community Engagement Strategies. *Review of Educational Research*, 76(4), 691–743.

- Skinner-Dorkenoo, A. L., Sarmal, A., Andre, C. J., & Rogbeer, K. G. (2021). How Microaggressions Reinforce and Perpetuate Systemic Racism in the United States. Perspectives on Psychological Science, 16(5), 903–925.

 https://doi.org/10.1177/17456916211002543
- Smiley, C. J., & Fakunle, D. (2016). From "brute" to "thug:" The demonization and criminalization of unarmed Black male victims in America. *Journal of Human Behavior in the Social Environment*, 26(3-4), 350–366.

https://doi.org/10.1080/10911359.2015.1129256

- Solórzano, D. G., & Yosso, T. J. (2002). Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research. *Qualitative Inquiry*, 8(1), 23–44. https://doi.org/10.1177/107780040200800103
- Sotirovic, M. (2003). How individuals explain social problems: The influences of media use.

 *Journal of Communication, 53(1), 122–137. https://doi.org/10.1093/joc/53.1.122
- Steele, C. M., & Sherman, D. A. (1999). The psychological predicament of women on welfare. In
 D. A. Prentice & D. T. Miller (Eds.), *Cultural divides: Understanding and overcoming group*conflict (pp. 393–428). Russell Sage Foundation.
- Stewart, E. A., & Simons, R. L. (2011). Race, Code of the Street, and Violent Delinquency. *Criminology*, 48(2), 569–603.

https://doi.org/10.1111/j.1745-9125.2010.00196.x.RACE

- Swisher, R. R., & Shaw-Smith, U. R. (2015). Paternal incarceration and adolescent well-being: Life course contingencies and other moderators. *Journal of Criminal Law and Criminology*, 104(4), 929–959.
- Tetlock, P. E. (2000). Cognitive Biases and Organizational Correctives: Do Both Disease and Cure Depend on the Politics of the Beholder? *Administrative Science Quarterly*, 45(2), 293. https://doi.org/10.2307/2667073

- The Joyce Foundation. (2019). *Top five prevention strategies as ranked by gun violence researchers* (pp. 1–6). The Joyce Foundation.

 http://www.joycefdn.org/assets/images/GVP-SURVEY.pdf
- The Joyce Foundation. (2022). *Toward a Fair and Just Response to Gun Violence:*Recommendations to Advance Policy, Practice, and Research (June). The Joyce Foundation.
- The White House. (2022). President Biden's Budget Invests in Reducing Gun Crime to Make Our Communities Safer. The White House Briefing Room. https://www.whitehouse.gov/omb/briefing-room/2022/03/28/fact-sheet-president-bidens-budget-invests-in-reducing-gun-crime-to-make-our-communities-safer/?utm_source=link
- Torre, M. E., Fine, M., Stoudt, B. G., & Fox, M. (2012). Critical participatory action research as public science. In H. Cooper (Ed.), *APA handbook of research methods in psychology* (2nd ed., Vol. 2, pp. 171–184). American Psychological Association. https://doi.org/10.1037/13620-011
- Trope, Y., & Liberman, N. (2010). Construal-Level Theory of Psychological Distance. *Psychological Review*, *117*(2), 440–463. https://doi.org/10.1037/a0018963
- Tsai, J., Lindo, E., & Bridges, K. (2021). Seeing the Window, Finding the Spider: Applying Critical Race Theory to Medical Education to Make Up Where Biomedical Models and Social Determinants of Health Curricula Fall Short. *Frontiers in Public Health*, *9*(July), 1–10. https://doi.org/10.3389/fpubh.2021.653643
- Tsui, J. C. (2014). Breaking free of the prison paradigm: Integrating restorative justice techniques into Chicago's juvenile justice system. *Journal of Criminal Law and Criminology*, 104(3), 635–666.
- Unzueta, M. M., & Lowery, B. S. (2008). Defining racism safely: The role of self-image maintenance on white Americans' conceptions of racism. *Journal of Experimental Social Psychology*, 44(6), 1491–1497. https://doi.org/10.1016/j.jesp.2008.07.011

Vasilogambros, M. (2022). Rising gun deaths push cities to shore up police and services. In *The Pew Charitable Trusts*. The Pew Charitable Trusts.

https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2022/0 2/10/rising-gun-deaths-push-cities-to-shore-up-police-and-services

Wacquant, L. (2002). Four strategies to curb carceral costs: On managing mass imprisonment in the United States. *Studies in Political Economy*, 69(Autumn), 19–30. https://doi.org/papers2:

//publication/uuid/49DD0F2F-AB8C-480E-A4BF-DA2C07000BB6

- Walton, G. M., & Yeager, D. S. (2019). Seed and soil: Psychological affordances in contexts help to explain where wise interventions succeed or fail. *Current Directions in Psychological Science*. https://www.researchgate.net/publication/337655717_Seed_and_soil_Psychological_affordances_in_contexts_help_to_explain_where_wise_interventions_succeed_or_fail
- Wildeman, C., & Wang, E. A. (2017). Mass incarceration, public health, and widening inequality in the USA. *The Lancet*, 389(10077), 1464–1474.

https://doi.org/10.1016/S0140-6736(17)30259-3

- Wilkinson, D. L. (2003). The Neighborhood: An Ecology of Danger. In *Guns, violence, and identity among african american and latino youth* (pp. 227–246). LFB Scholarly Pub. http://pi.lib.uchicago.edu/1001/cat/bib/11127894
- Williams, D. R., & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports*, *116*(5), 404–416.

https://doi.org/10.1016/S0033-3549(04)50068-7

- Williams, D. R., & Jackson, P. B. (2005). Social sources of racial disparities in health. *Health Affairs*, 24(2), 325–334. https://doi.org/10.1377/hlthaff.24.2.325
- Williams, D. R., & Mohammed, S. A. (2013). Racism and Health I: Pathways and Scientific Evidence. *American Behavioral Scientist*, *57*(8), 1152–1173.

https://doi.org/10.1177/0002764213487340

- Wolf, C. R., & Rosen, J. A. (2015). Missing the mark: Gun control is not the cure for what ails the U.S. mental health system. *Journal of Criminal Law and Criminology*, *104*(4), 851–878.
- Wozniak, K. H. (2019). The Effect of Exposure to Racialized Cues on White and Black Public Support for Justice Reinvestment. *Justice Quarterly*, 1–29.

```
https://doi.org/10.1080/07418825.2018.1486448
```

- Yeager, D. S. (2017). Dealing With Social Difficulty During Adolescence: The Role of Implicit Theories of Personality. *Child Development Perspectives*, 11(3), 196–201. https://doi.org/10.1111/cdep.12234
- Yeager, D. S., Bryan, C. J., Gross, J. J., Murray, J., & Krettek, D. (2022). A Synergistic Mindsets Intervention Protects Adolescents from Social-Evaluative Stress.
- Yeager, D. S., Dahl, R. E., & Dweck, C. S. (2018). Why interventions to influence adolescent behavior often fail but could succeed. *Perspectives on Psychological Science*, *13*(1), 101–122. https://doi.org/10.1177/1745691617722620
- Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C. P., Lee, H. Y., Brien, J. O., Flint, K., Roberts, A., Trott, J., ICF International, Greene, D., Walton, G. M., Dweck, C. S., O'Brien, J., Flint, K., Roberts, A., Trott, J., ... Dweck, C. S. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, 108(3), 374–391. https://doi.org/10.1037/edu0000098
- Yeager, D. S., Walton, G., & Cohen, G. L. (2013). Addressing achievement gaps with psychological interventions. *Phi Delta Kappan*, 94(5), 62–65.

https://doi.org/10.1177/003172171309400514