



Informed Influence: The Impact of Media Portrayal on Black Lives Matter Support

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Informed Influence:
The Impact of Media Portrayal on Black Lives Matter Support

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for a Bachelor of Arts degree with Honors

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Abstract

This paper investigates the influence that the media portrayal of police violence has on support for the Black Lives Matter (BLM) Movement using a belief elicitation study. Participants are exposed to a fictitious media article reporting a police killing. Across randomly assigned treatment groups, I vary both the gender of the victim of police violence and the context provided in the article about police violence and the BLM Movement. I measure participants' beliefs about discrimination, social justice, and the Black Lives Matter Movement to construct an overall support index for BLM. I find that on an aggregate level, there is no significant effect of either the gender of the victim or provided context on BLM support. However, I do find baseline differences in support across demographic groups. Most notably, Democrats report higher support for BLM than Republicans in my survey. I also find significant interaction effects between the treatments and different demographic characteristics. Notably, male respondents had significant increases in BLM support when exposed to the gender and context treatments. Future research should examine the impact of larger, more sustained media interventions on BLM support.

Acknowledgements

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1 Introduction

While the Black Lives Matter (BLM) Movement has existence for over eight years, the movement received much of its strongest support and public recognition in the summer of 2020 amidst the COVID-19 pandemic and a string of violent police killings of Black Americans. Although some of the victims, like George Floyd of Minneapolis, made national news and became a face for the movement, other victims remained out of the public view on a national scale but were covered by local media outlets. Without media coverage, events of police violence would be unknown to the broader public unless individuals seek out police reports or have personal connections to those affected by the events. In this way, media outlets play an integral role in keeping the public informed of current events. Subsequently, the way that media presents specific events can influence how viewers perceive those events and make judgements on related issues. Specifically for Black Lives Matter, media coverage of the movement peaked in the summer of 2020 following a decrease in support during earlier years of the Trump presidency (Mehta, 2021). In this paper, I ask the following research question: How does media portrayal of instances of racial injustice shape support of the Black Lives Matter Movement?

I use a belief elicitation study to estimate the impact of media portrayal on individuals' willingness to engage in the Black Lives Matter movement. Utilizing a nationally representative sample from an online survey platform, I expose study participants to a fictitious media article modeled after a real article reporting a police killing. I randomly assign participants to different treatment groups that receive variations of the same article. Across treatment groups, I vary both the gender of the victim and the context provided in the article about police violence and the BLM Movement. Following the treatment, I elicit the participants' beliefs on discrimination, social justice, and the Black Lives Matter Movement. Next, I construct a composite index of support for the Black Lives Matter Movement as the average of multiple indicators of approval for the cause. Making use of the random assignment, I use OLS to estimate the effect of the two treatment arms (gender and context) on support for the

BLM Movement. I also explore heterogeneity in the treatment effect based on respondent characteristics.

Overall, I do not find significant treatment effects in either arm on the aggregate level. However, there are different levels of support for Black Lives Matter across demographic groups regarding both baseline measures and treatment effects. Specifically, female respondents report higher levels of support than male respondents, and Black respondents have higher levels of support than white respondents, although these differences are not statistically significant. Democrats respondents have significantly higher support for BLM than Republican respondents. I also find differences in the impact of the context and gender treatments for different demographic characteristics. Notably, male respondents who received an article about a police killing with additional BLM context provided or with a female victim showed higher levels of support for Black Lives Matter than female respondents.

Particularly due to the recency of this topic, there is little economic research on the explicit connection between events of police brutality and the determinants of support for the Black Lives Matter Movement. While many popular news outlets have written stories on the rapid spread and overall coverage of the movement as a whole, few have worked to estimate the impact of media portrayal on Black Lives Matter support. This thesis contributes to the literature by directly assessing how variation in the content of media coverage impacts support for the movement.

The rest of the paper proceeds as follows: Section 2 describes past research on the relationship between media and support for social causes. Section 3 details the methodology utilized in my research, including the experimental design and survey, and Section 4 discusses the data collection process. Section 5 presents the experimental findings, and Section 6 provides concluding statements.

2 Background

Previous research has focused on general motives for individual protest participation. In a study on individual protest engagement, Schussman and Soule (2005) cite three of the main reasons and analyze how each component contributes to participation. These core explanations are: (1) biographical ability, which is the absence of personal responsibilities that may hinder participation, such as familial obligations or employment, (2) political engagement, which is an interest in political matters, and (3) structural availability, which is the presence of resources that facilitate protest participation (Schussman and Soule, 2005). These three explanations highlight an individual’s personal circumstances and interests as the key forces driving protest participation. Alternatively, DiGrazia (2017), in their study examining individual protest participation in the United States, finds that participation in protests varies based on the type of protest. DiGrazia concludes that participation in conventional protests— those that are low-risk and socially legitimate— is high for socially privileged individuals. Conversely, participation in more unconventional protests— those that require more active engagement and are higher risk— is high for socially disadvantaged and ideologically extreme individuals. DiGrazia’s work contradicts previous conclusions that protest engagement is dependent on an individual’s circumstances and not the subject matter of protest (Brown, 2012). In this way, DiGrazia’s work suggests that participation in the Black Lives Matter movement may be dependent upon public perception of the movement.

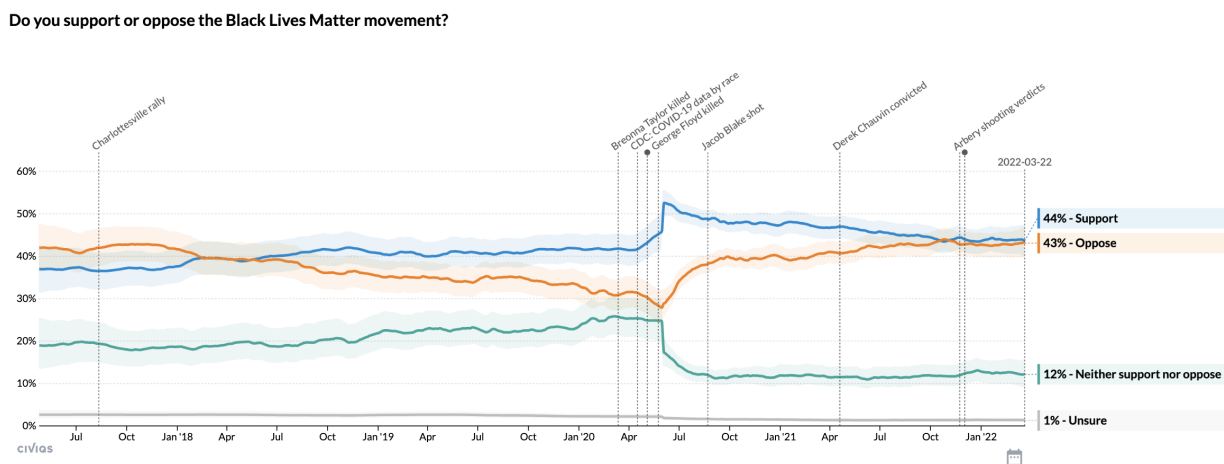
Prior to the summer of 2020, the movement was widely regarded in the United States as more “unconventional.” Supporters were viewed as part of a violent group, with radical ideas about law enforcement and criminal justice (Gale, 2020). The Black Lives Matter movement began as a social media hashtag, #BlackLivesMatter, following the acquittal of George Zimmerman for the fatal shooting of Trayvon Martin in 2012 (Ilchi and Frank, 2021). The movement, founded by three Black female organizers, Alicia Garza, Patrisse Cullors, and Opal Tometi, has grown into a conceptual and political organization whose mission is to “eradicate white supremacy and build local power to intervene in violence inflicted on Black

communities by the state and vigilantes” (“Black Lives Matter”).

When Michael Brown, an 18 year old Black man, was fatally shot by a white police officer in Ferguson, Missouri, BLM garnered more national attention as movement leaders proposed increased police accountability (Ilchi and Frank, 2021).

In the post-Ferguson era, support for BLM in the United States was still limited within public discourse, as many public figures condemned the movement as anti-police in sentiment and even suggested that the movement incited a “war on police.” For example, former president Donald Trump stated that BLM supporters were “calling death to the police” in an address at the 2016 Republican Convention (Flores, 2016). Limited support for the movement persisted through the Trump presidency (2016 to 2020), despite white nationalism growing in prominence. In an analysis of closed captioning data from cable news broadcasts, Mehta (2020) find that mainstream press mentioned Black Lives Matter half as often during the Trump presidency than in prior years until May 2020.

Figure 1: Support and Opposition for Black Lives Matter over Time



Notes: This figure describes the progression of American support for the Black Lives Matter Movement from registered voters from April 2017 to December 2021, according to a sample of registered voters in a poll conducted by Civiqs.

Source: Civiqs

Figure 1 describes the progression of American support for the Black Lives Matter Movement from registered voters from April 2017 to December 2021, according to a poll conducted

by Civiqs. As the chart demonstrates, in late spring and early summer of 2020, the proportion of registered voters who supported the Black Lives Matter Movement increased from a consistent baseline of around 40% to upwards of 50% (“Black Lives Matter”, 2021).

Ignited by the killing of George Floyd in Minneapolis, BLM experienced a clear transition from more isolated engagement to mass media coverage and support. Just as media coverage increased, public support and protest participation for the movement increased. Data science firms identified the Black Lives Matter movement of 2020 as one of the largest social movements in history by participation (Buchanan et al., 2020). Specifically, the peak of protests occurred on June 6, 2020, when 500,000 people attended protests in 550 locations across the country (Buchanan et al., 2020). The movement also experienced an increase in positive sentiment compared to previous years, particularly due to the influences of prominent corporations, such as Amazon and Google, who pledged multi-million dollar donations to BLM and due to people’s increased availability of time due to the COVID-19 pandemic (“Factbox”). While sources such as these suggest a correlation between an increase in media coverage and an increase in protest attendance, no causal relationship has yet been determined between media and Black Lives Matter specifically. Given the shift to widespread public support for the movement in 2020, DiGrazia’s work would suggest that Black Lives Matter would garner participation both from socially privileged and socially disadvantaged individuals. However, just as Figure 1 shows, not all socially privileged or disadvantaged individuals currently support BLM. Specifically, there are similar shares of individuals who support and who oppose Black Lives Matter. These opposite beliefs present a platform to explore a more direct link between perception of events within the Black Lives Matter Movement and an individual’s willingness to engage in the movement.

Similar to DiGrazia, Cantoni et al. (2019) support the notion that individual protest participation derives from the perception of other people’s participation in the protest. They set forth a model for predicted protest engagement using belief elicitation. Their results support strategic substitutability, which suggests that, if an individual believes many people

are already participating in a protest, there is less of an incentive to participate because one can free-ride on others' costly participation (Cantoni et al., 2019). Burtstyn et al. (2020) further the idea that political engagement is influenced by peers, especially in a dynamic setting. In a study of consecutive annual protests for the Hong Kong anti-authoritative movement, they find that initial participation in the first protest increases the likelihood of participating in the protest the following year. Their research highlights new mechanisms by which the participation of others shapes an individual's political engagement, including the formation of relationships with other individuals engaged in the protest and a change in political beliefs. In addition to treating an individual's protest engagement as a function of their beliefs about the participation of others, I propose a mechanism in which an individual's engagement in the movement is related to the type of media exposure that the individual receives.

Other research has identified the impact that media has on individuals' behavior. Simonov et al. (2020) find that an increase in Fox News cable news viewership decreased the propensity of viewers to follow stay-at-home guidelines and comply with social distancing measures in the COVID-19 pandemic. In addition, Azrout et al. (2012) conclude that the environment of information surrounding media content had an effect on support for the European Union(EU) enlargement.

More specific to Black Lives Matter, Peay and Camarillo (2020) illustrate how media portrayal of the Black Lives Matter movement impacts individuals' willingness to engage in the movement. In a survey experiment to determine the effects of racial identity on protest perception, Peay and Camarillo introduce a fictitious media treatment describing a Black Lives Matter protest with different racial compositions. The authors conclude that protests with all-Black participants were perceived to have a higher likelihood of violent outcomes than those with a diverse group of protest participants. Further, the study finds that participants who disagreed with protest motivations and methods were more likely to perceive a threat of violence within the protests. This study underscores how media portrayal of a

protest can impact protest engagement and support for the movement. From subtle changes in the language used to describe a protest, media sources can alter a reader's perspective not only of an individual protest event, but also of the motivations of the movement as a whole. Instead of using media to depict a Black Lives Matter protest, in my approach I use media to depict an instance of police violence. In this way, I focus on BLM support in relation to the media regarding one of the movement's main motivations, not just to the media regarding the movement itself.

In addition to the general influence that media exposure has on support for the Black Lives Matter movement, I also explore the differences in movement support across the gender of media subjects. Past literature on police violence towards women is very limited. While violence against women (VAW) is well-studied, there is a gap in literature on the direct harm to women by law enforcement. Ritchie (2017) details the specific oppression and instances of police violence that women and gender-nonconforming individuals of color experience. In 2020, just as #BlackLivesMatter rose in social media support, another social justice movement gained prominence, #SayHerName. The #SayHerName movement, founded in 2014 by the African American Policy Forum, focuses on raising awareness of the stories of Black women and femmes who have been victimized by state-sanctioned violence ("SAY HER NAME"). Since female victims of police violence are often overlooked, there is a gap in mainstream media coverage regarding their killings. In my thesis, I consider how media detailing women as a victim of police violence impacts support for BLM.

3 Methodology

3.1 Experimental Design

This study seeks to identify the impact of media portrayal of police violence events on engagement with the Black Lives Matter movement. Following an informational treatment, which consists of reading a fictitious newspaper article covering a police killing, I measure engagement through a series of post-treatment questions aimed to elicit beliefs about the Black Lives Matter Movement. The approach draws on methods from a variety of related study designs. Alesina et al. (2021) use a large-scale study to estimate individuals' perceptions of racial inequities between Black and white Americans, their causes, and potential interventions. I draw on their framework for eliciting beliefs about issues of social inequality and survey questions to measure perceptions of racial inequality.

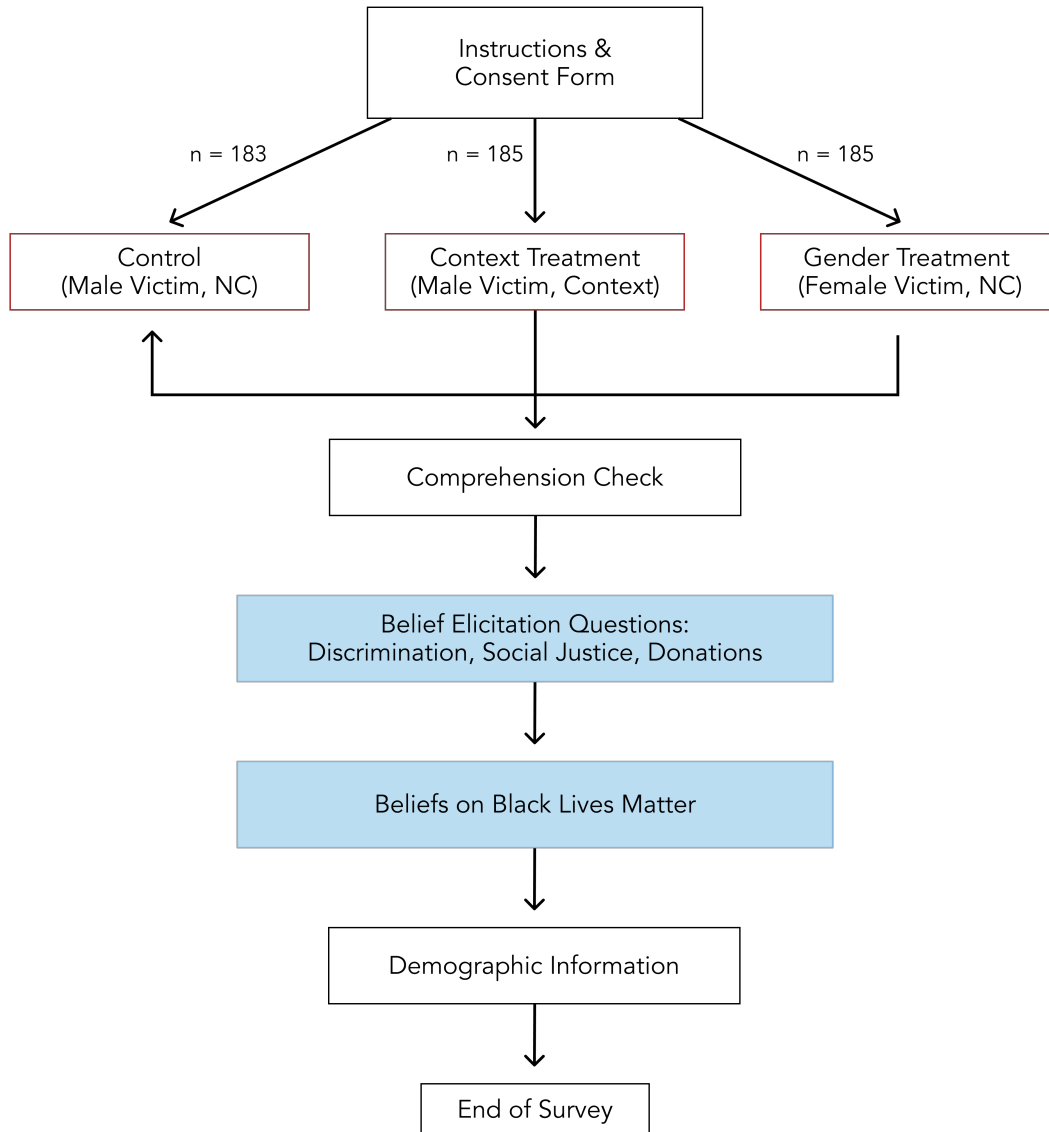
3.1.1 Survey Structure

The survey includes a consent page with instructions, the treatment news article, and post-treatment questions. The full questionnaire is included in the Appendix. Figure 2 visualizes the structure of the online survey.

3.2 Treatment: Media Intervention

Using gender of police violence victim and context provided as the treatments of interest, the media intervention has three distinct variations, consisting of a control media article and two articles representing each treatment of interest. The participants are randomly assigned to read one of three articles describing an adapted police violence report. Only the gender of the victim and the amount of contextual information provided about the police killing change in each article. Therefore, the victim is either: 1) a man who is portrayed without the broader context of police killings during the period (control), 2) a woman who is portrayed without the broader context of police killings during the period, or 3) a man who is portrayed

Figure 2: Flow Chart of Survey Structure



Notes: This flow chart combines the two waves of the survey data collection into one figure (total N= 553)

within the broader context of police killings during the period.

3.2.1 Context Treatment

From my analysis of past literature about media impacting the behavior of its viewers, I identify two potential mechanisms to examine media influence on Black Lives Matter

engagement. The first mechanism is the overall tone of the media, specifically whether it is positive or negative. Using patterns of textual analysis, a “positive” media portrayal for the victim of police violence is defined as one in which the author employs explicit and implicit language that suggests the victim is innocent and that the law enforcement officer is guilty of wrongdoing. Conversely, a “negative” media portrayal for the victim of police violence is defined as one in which the author employs explicit and implicit language that suggests the victim is guilty of wrongdoing and the law enforcement officer is innocent.

The second mechanism for potential media influence is the amount of circumstantial context that the media outlet chooses to include in a media source. Vreese and Boomgaarden (2003) find that participants who were exposed to a media treatment that included the broader implications of the European Union (EU) and EU enlargement reported higher levels of general support for the EU generally. Within my design, this concept would manifest itself as varied levels of support for Black Lives Matter depending on whether survey participants receive media treatment that includes background information on the history of police killings in America and the principles of the BLM movement.

The first mechanism is difficult to isolate in a controlled experiment. For example, outside of small diction changes such as stating that a victim “died due to a shooting” instead of a victim “was killed,” there are limited edits to adjust the tone and perception of an article without adding key information and descriptors to the source. Specifically, in order to portray a victim in a “positive” or innocent light, the article would need to include information about whether the victim was unarmed or whether the police had a warrant for the victim’s arrest. However, the inclusion of such information changes significant components of the content in the media source. An information treatment that relied on the inclusion or exclusion of key factors such as these would not help to identify the direct impact of media portrayal, as different treatments would feature not only different media portrayals, but also different underlying incidents.

For this reason, I test the second mechanism in my study and directly vary the amount of

contextual evidence provided in each treatment group. Treatment groups receive the same baseline news article about a police killing; however, some groups' interventions include an additional text that contextualizes the police killing with the broader scope of national police violence and the Black Lives Matter movement.

3.2.2 Gender Treatment

Additionally, I include a gender treatment in my experiment in order to increase understanding of the differences in reactions towards police killings of female victims as opposed to male victims. Especially related to women of color, this research presents an opportunity to address the effects of intersectionality within police violence. In a study to estimate the impact of media portrayal on perceptions of Muslims and acts of "terrorism", West and Lloyd (2017) randomly assigned respondents to read a real newspaper article describing a terrorist attack perpetrated by either a Muslim or a White non-Muslim (West and Lloyd, 2017). The only difference between the treatment articles were necessary changes in the description of the perpetrator. This study serves as a model of how to minimally adjust a treatment in order to capture differences in support based on the demographic of a media subject. Specifically, for the gender treatments, I change all language depicting the victim as male to language depicting the victim as female.

While any media source is inherently biased, by only adding context that is unrelated to the factual information in the article and changing the gender of the victim, I hold fixed the amount of bias in each treatment group. Figure 3 demonstrates the formation of treatment groups from the treatment arms.

By leveraging the use of context and varying the gender of police violence victims, I address two main hypotheses:

Hypothesis 1: Exposure to a media article about a police killing will incite more support for Black Lives Matter protests and general racial injustice reform if additional context of police violence in America is provided than if no context is provided.

Figure 3: Table of Treatments

Gender	Media Portrayal		
		No Context Provided	Context Provided
	Man	Man, No Context Provided (Control) (N = 183)	Man Context Provided (N = 185)
Woman	Woman, No Context Provided (N = 185)		

Notes: This figure demonstrates the formation of treatment groups from the treatment arms.

Hypothesis 2: Exposure to a media article about a police killing will incite more support for Black Lives Matter protests and general racial injustice reform if the victim of the police violence is a woman than if the victim is a man.

In belief elicitation studies, one method of determining the causal impact of a treatment is by collecting pre-treatment and post-treatment responses to desired questions. In this way, researchers obtain data that suggests how a treatment changes a participant’s beliefs. I chose not to pursue this method of belief elicitation in my study for two main reasons: experimenter demand effects (EDEs) and resource constraints. From a methodological standpoint, if I were to elicit beliefs about Black Lives Matter and racial injustice prior to the implementation of the media intervention, study participants would be more primed to the aims of the study. As a result, participants may be inclined to report beliefs based on what they deem socially appropriate or desired for the study instead of their true beliefs. Zizzo (2010) finds that this type of experimenter demand effects are most harmful, as EDEs that are positively correlated with the objectives of the study impair the validity of results.

In addition to attempting to minimize EDEs, I also do not collect pre-treatment means due to resource constraints. One way to avoid EDEs is by including a control group that receives no media treatment. With this control group, I could obtain proxy measurements of pre-treatment beliefs by eliciting beliefs of participants who do not receive media treatment.

However, based on the sample size that I determined necessary for statistical power, my limited funding would not cover desired treatment groups in addition to a control group. Therefore, I do not elicit pre-treatment beliefs to maximize demand-free behavior and to efficiently utilize a constrained budget.

3.3 Article Selection

According to a Pew report, 86% of Americans receive their news primarily via digital platforms, and 52% of Americans prefer digital platforms as their main news source (Shearer, 2021). For this reason, I chose to construct an online news source as my treatment method. In this way, I was able to resonate with a broad audience for maximized treatment effects.¹ In order to obtain a baseline newspaper article for alteration in the treatment, I searched through a database of police killings compiled by Mapping Police Violence (“2020 Police Violence Report”). Within the timeline of May 1, 2020 to June 30, 2020, I identify newspaper articles that covered killings by police. This timeline reflects a one-month timeframe around June, 2020, which was the height of the Black Lives Matter movement. I reviewed victims of different genders, races, and perceived threats (unarmed vs. armed) to pinpoint what sort of language was used in different circumstances. The article chosen upon which to base the treatment article is a short report by a local Oklahoma news station, and it describes the killing of a Black man named Robert L’Don Harris following a traffic stop (Schaer, 2020).

From this baseline article, I pull out key elements of the fatal shooting of the male passenger to create a control article with a male police violence victim with no added Black Lives Matter Context. For the gender arm of the treatment, I change all descriptions of the male victim to descriptions of a female victim. For the context arm of the treatment, I add a short paragraph to the bottom of the article that provides background information contextualizing this instance as one in a series of police violence episodes. I also explicitly mention the names of other victims of police violence who were prominent in the Black Lives

¹This method was effective, as 76% of respondents report that their primary source of news is the internet.

Matter Movement. The context treatment includes the following additional paragraph:

“This event falls after the string of police killings in the summer of 2020. According to the Mapping Police Violence Year-End Report, 1,126 people were killed by police in 2020 (“2020 Police Violence Report”). Though Black Americans comprise 13% of the population, they made up a disproportionate 27% of all police killings in that year. Most notably, the murders of George Floyd and Breonna Taylor have taken the national stage, as Americans throughout the country called for the end of police violence against Black individuals.”

The full treatment article is printed in Appendix Section A.5.

3.4 Post-Treatment Questions

Following the informational treatment, respondents answer a series of simple, objective questions about the facts of the treatment article to check for comprehension. If the participant answers these questions incorrectly, they are instructed to answer the questions again, until all answers are correct. The comprehension questions are located on the same page of the survey as the treatment article, so participants are encouraged to read the article more closely in order to answer the questions correctly. These comprehension checks ensure that respondents can only elicit their beliefs once they have had substantial exposure to the treatment. The comprehension checks ask participants the following questions: 1) In what state did the shooting occur? 2) What was the gender of the victim who died from the shooting? 3) Based on information provided in the article that you read, Black Americans comprise what percentage of the United States population? (Only respondents in the Male Victim, with Context treatment group received this question).

Once participants answer the comprehension questions correctly, they are directed through a series of questions concerning their beliefs about Black Lives Matter, police violence, and racial injustice. Respondents will answer questions on a Likert scale, with textual multiple-choice answers coded from 1-7. Many of the questions were duplicated from a study by Alesina et. al (2020) that measured perceptions of racial gaps, their causes, and how to address them.

3.4.1 Outcome Variables

BLM Support Index (Primary Outcome Variable)

Using the survey, I obtain estimates for general Black Lives Matter support and construct a support index variable that is the average of four key outcome variables on a Likert scale of 1-7. The four main outcome variables are: support for the principles of the Black Lives Matter movement, confidence in police, general support for protests as a means of furthering Black Lives Matter, and personal support for attending a Black Lives Matter protest. From

these four measures, I factor in multiple aspects of an individual’s support and engagement with the Black Lives Matter movement and with issues of racial injustices.

Another key variable that I collect is a hypothetical donation to Black Lives Matter. This question provides an opportunity for participants to allocate a hypothetical donation between Black Lives Matter and other nonprofit organizations for social causes.² The results from this financial contribution demonstrate a participant’s beliefs on the importance of BLM relative to other social issues, as they will likely allocate funds to organizations which they deem the most pressing or significant.

Table 1 describes the main outcome variables, their corresponding survey questions, and the motivations for their collection.

²The other organizations are sources from a database of the most prominent charities in the US (Barrett, 2021). They include: Feeding America, American Red Cross, Dana-Farber Cancer Institute, Salvation Army, St. Jude Children’s Hospital, Boy & Girls Club of America, and Habitat for Humanity

Table 1: Table of Key Outcome Variables

Outcome Variable <i>Survey Question for this Variable, if applicable</i>	Motivation
Support for BLM Mission: <i>In terms of the Black Lives Matter Movement, to what extent do you agree or disagree with the mission of the organization, included below.</i> <i>“#BlackLivesMatter was founded in 2013 in response to the acquittal of Trayvon Martin’s murderer. Black Lives Matter Global Network Foundation, Inc. is a global organization in the US, UK, and Canada, whose mission is to eradicate white supremacy and build local power to intervene in violence inflicted on Black communities by the state and vigilantes.”</i>	A measure of an individual’s specific support for the explicit mission of the Black Lives Matter organization
Confidence in Police: <i>To what extent do you agree or disagree with the following statement?: I can trust the police to help me and protect me.</i>	A measure of an individual’s perception and opinion of law enforcement, a notion closely related with perceptions of racial injustice within the Black Lives Matter Movement
Support for BLM Protests Method: <i>In terms of the Black Lives Matter Movement, to what extent do you agree with or disagree with the actions of protesters in 2020?</i>	A measure of an individual’s support for a common method used by activists to engage in the Black Lives Matter Movement
Likelihood of Attending Protest: <i>What is the likelihood that you would participate in a Black Lives Matter protest?</i>	A measure of an individual’s willingness to engage with the Black Lives Matter Movement through personal action
Average BLM Support Index	An average measure of an individual’s support for the Black Lives Matter Movement that encompasses the movement’s principles, methods, and engagement
Donation to BLM: <i>Suppose you were given a hypothetical \$100 total to donate to some of the most popular nonprofit organizations which help people in the U.S. deal with the hurdles of everyday life. You decide how many dollars out of the \$100 that you want to allocate to each of the following organizations. Your total donation must sum to \$100.</i>	A measure of an individual’s philanthropic support for the Black Lives Matter organization, relative to other social causes

Notes: Options for the donation to non-profit organizations are Black Lives Matter, Feeding America, American Red Cross, Dana-Farber Cancer Institute, Salvation Army, St. Jude Children’s Hospital, Boy & Girls Club of America, and Habitat for Humanity

In addition to the main outcome variables reported in the table, I elicit other beliefs on related topics. However, the variables included in Table 1 are the main focus of the experiment. The post-treatment questions elicit beliefs on the following subjects:

- *Media Exposure:* Participants are asked to select the primary method by which they stay up-to-date on current events. The information treatment is modeled after an internet newspaper article, so this information is useful to understand if the treatment method is an effective way of reaching the target audience.
- *Discrimination Beliefs:* These measures provide a general context for participant’s beliefs about the significance of Black and white individuals experiencing discrimination from the police due to their race. This section on beliefs also provides insight into participants’ perspectives on the intentions of law enforcement officers and areas for reform.
- *Social Justice Significance and Activism* This set of belief elicitation questions provides information about how study participants view the importance of social justice issues, as well as their own awareness of the issues.
- *Peer BLM Protest Attendance* This measure provides information on whether an individual perceives the movement as something his own peers would join.

I select the order of post-treatment questions to minimize the effects of survey attrition, or participants failing to complete the survey. Generally, I utilize a select number of post-treatment questions that will keep the total duration of the survey under 10 minutes. By keeping survey length short (15 belief elicitation questions and 10 demographic questions) and questions on target, I hope to have small effects of respondent fatigue, which is a significant cause of survey dropout (Hochheimer et al., 2016). Further, I strategically order the questions to ensure that I get necessary information from participants. Specifically, I placed

belief elicitation questions before demographics questions. I place questions concerning demographic and general information at the end of the survey both to signal the survey’s end and to provide an undemanding conclusion to the survey for those experiencing respondent fatigue.

3.5 Data Collection

I distributed the survey through the commercial survey company Prolific. The survey company pays for survey respondents at an hourly rate of \$9.52, and the responses are anonymized. The total cost of the research was \$1650.00. This cost included the prorated hourly payment to each participant, a 33% service fee to Prolific for each participant payment, and Prolific’s service fee for drawing a representative sample of the United States. The funding for this research was provided by Harvard University’s undergraduate Economics Department and Applied Mathematics Departments. The survey collected 553 responses³ from a representative sample of the United States population.⁴ All survey participants were adults, aged 18 or older. All survey respondents were directed to a consent page, where they were informed of the general research aims of the survey and that their participation was voluntary. Prolific paid participants directly through the survey site’s platform.

The survey was distributed as a pilot and two waves that split the full sample size for the actual survey. The pilot survey (N=5) launched on January 30th, 2022 in order to receive feedback on the survey and identify any technical difficulties. The first wave of the survey was launched on February 2, 2022 with a sample size of 300 participants who comprised a representative sample of the United States population. The final wave of the survey launched on February 4th, 2022, and it enlisted 250 participants who had not taken the survey during the previous studies. I separated the data collection into two waves so that I could make logistical changes to the distribution once I began collecting data. From the first wave of

³This metric includes the $300 + 250 = 550$ survey responses from the two sample groups, as well as 3 additional responses which were not completed in full. The pilot survey responses were not included in the final data.

⁴Power calculations were done using existing survey data. See appendix for details.

the study (N=300), I learned that participants spent a shorter amount of time to complete the survey than I estimated. With this information, I adjusted the predicted time duration and corresponding payments to each individual for the final wave (N=253⁵). Pilot survey responses were not included in the final data. All survey responses for the two waves of the actual survey were collected in Qualtrics, and there is no distinction between them for the purpose of data analysis. Harvard University's Committee for the Use of Human Subjects reviewed this study to determine that it was exempt from IRB approval.

⁵This wave includes the 250 desired responses, as well as 3 observations that were not completed in full

3.6 Empirical Strategy

The randomization of treatment groups means that the differences that I observe in means across the groups are attributable to the treatment. With this assumption, I measure the treatment effects using the following regression specification:

$$S_i = \beta_0 + \beta_1 \cdot Female_i + \beta_2 \cdot Context_i + \epsilon_i \quad (1)$$

The parameter S_i corresponds to the index variable of support for the Black Lives Matter movement for survey participant i , calculated as the average of four selected outcome variables. $Female_i$ is an indicator variable that survey participant i reads a treatment article where the victim of the police killing is a woman, and $Context_i$ is an indicator variable that survey participant i reads a treatment article with context of police violence and explicit mention of the BLM movement.

β_1 is the coefficient measuring the treatment effect of the victim being a woman, and β_2 is the coefficient measuring the treatment effect of including police violence and BLM context in the article. β_0 is the average support index for the Male, No Context group, and ϵ_i is the error term for participant i .

4 Results

4.1 Descriptive Statistics

Table 2 displays descriptive statistics for the survey sample. The table indicates that 553 individuals completed the survey in total, and it took respondents an average of 6.5 minutes to complete the survey. 50.1% of respondents identify as male, and the average age of respondents is 39 years old. The racial breakdown of the sample was 76% white, 11% Black, 10% Asian, and 8% other or mixed race.⁶ 11% of respondents identify as ethnically Hispanic, Latinx, or Spanish. Regarding the geographic breakdown of respondents locations in the United States, the Southeast and West regions of the country contributed the most participants, with 25% and 23% of respondents in those areas, respectively. Additionally, the table shows that 49% of respondents have a Bachelor's degree or higher level of education, and the average income was \$77,786 with high variation.

⁶This question permitted survey respondents to select multiple answer choices, which explains why the sum of the means of each race is greater than 1.

Table 2: Sample Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Median	Max
Duration for Survey Completion (min)	553	6.524	4.400	2.083	5.217	39.083
Male	535	0.501	0.500			
Age	551	39.332	15.397	19.500	39.500	72.000
Household Family Income	549	77,786.88	73,377.66	15,000	75,000	500,000
Ethnicity:						
Non-Hispanic	551	0.893	0.309			
Hispanic, Latinx, or Spanish	553	0.107	0.309			
Race:						
White	524	0.758	0.429			
Black	524	0.109	0.312			
Asian	524	0.101	0.302			
Other Race	553	0.083	0.276			
Region:						
Resident of Midwest	551	0.201	0.401			
Resident of Northeast	551	0.198	0.399			
Resident of West	551	0.229	0.420			
Resident of Southeast	551	0.250	0.434			
Resident of Southwest	551	0.122	0.327			
Neighborhood Type:						
Resident of Urban Area	551	0.287	0.453			
Resident of Rural Area	551	0.149	0.356			
Resident of Suburban Area	551	0.564	0.496			
Education:						
Less than High School Education	551	0.009	0.095			
Less than Bachelor's Degree in Education	551	0.510	0.500			
Bachelor's Degree or Higher in Education	551	0.490	0.500			
Political Affiliation:						
Republican	550	0.149	0.357			
Democrat	550	0.493	0.500			
Other Political Affiliation	553	0.320	0.467			

Note: Respondents were free to not answer questions so the number of observations varies across variables. Binary demographic variables are coded as 1 if a respondent identifies with a certain characteristic and 0 if not. See the Appendix Section A.1 for definitions of demographic variables.

As a measure of the randomization between the different treatment groups, I run t-tests for the means of key demographic information for each group. For an arbitrarily large sample, the means of different groups should be the same. For the balance test between the Context and No Context groups, the only demographic that has a statistically significant difference between means is the indicator for a survey respondent being a Democrat, such that the Context group has 8 percentage points fewer Democrat respondents than the No Context group. Likewise, I find that the Female Victim and Male Victim groups have no statistically significant differences between means across all demographic variables except the Democrat and Urban resident indicators, such that the Female Victim group has 10 percentage points more Democrat respondents and 10 percentage points more Urban residents than the Male Victim group. With a 95% confidence level, one would expect that one of the many demographics variables would have significant differences by chance. Therefore, I conclude that my survey has clear random assignments between the treatment groups. See Appendix Section A.3 for the full results of the balance tests.

4.1.1 Generalizability

One potential limitation of utilizing an online survey to gain insights into the beliefs of a broader population is generalizability. My potential pool of respondents are only individuals who are registered with Prolific, which clearly does not represent the entire population. Table 3 shows a high level comparison between the demographics of the sample population and the United States population.

The study sample and US population have similar distributions of genders and races. However, the sample underrepresents Hispanic, Spanish, and Latinx individuals and has a higher median household income than the broader US population. However, some of the difference in median household incomes may be attributed to the method of collecting income information. The survey recorded income information by requesting that a respondent select a range in which their income falls, and the midpoint of that range is recorded as the

Demographic	Experiment Sample	US Population Share ⁷
<i>Gender</i> Percentage of Male Individuals	50.1 %	49.1%
<i>Race and Ethnicity</i>		
White	76%	76%
Black	11%	13%
Asian	10%	6%
Other Race	8%	NA
Hispanic, Spanish, or Latinx	11%	18.5%
<i>Median Household Income</i>	\$75,000	\$62,843
<i>Education</i>		
High school graduate or higher	99%	88%
Bachelor’s degree or higher	49%	32%

Table 3: Comparison of Sample and US Populations

household income for that individual. Therefore, the household income variable can assume a specific set of values. However, the actual median household income for the United States falls within the same income bracket as the sample’s median income, with both values existing between \$60,000 and \$99,999. Another key difference between the two populations is their education levels. The sample population has a higher share of high school graduates and graduates with Bachelor’s degrees.

4.2 Aggregate Black Lives Matter Support

Table 4 shows the summary statistics for all relevant outcome variables. Table 4 demonstrates that, on average, respondents somewhat agree that Black individuals experience significant discrimination from police due to their race, while white individuals do not. (5.42 vs. 2.19). Respondents also report that discrimination on the basis of race in the United States is an extremely important issue, with 94% of sample respondents indicating that the issue is somewhat important. Interestingly, even though 71% of respondents express at least a positive amount of trust for the police, 92% of respondents still support policy changes

in policing and law enforcement that are aimed at promoting public safety and increasing police transparency. The subsequent section addresses other outcomes in more detail.

Table 4: Summary Statistics of Outcome Variables

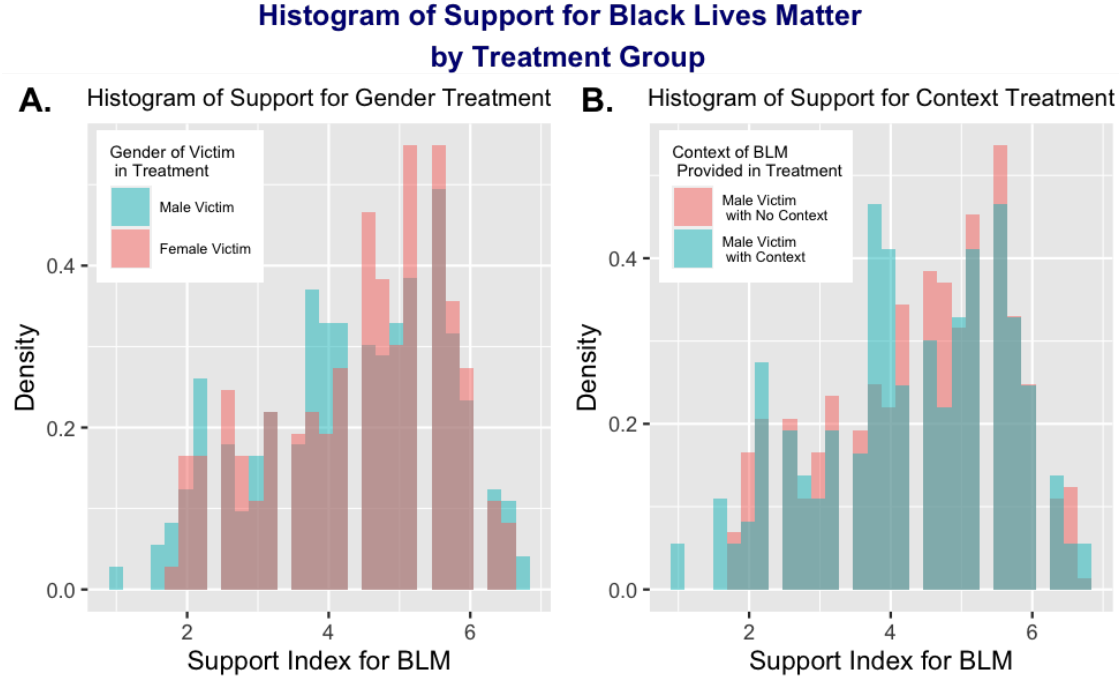
Variable	N	Mean	St. Dev.	Min	Median	Max
Continuous Outcome Variables:						
Significance of Discrimination against Black people (1-7)	551	5.417	1.524	1	6	7
Significance of Discrimination against White People (1-7)	551	2.192	1.152	1	2	7
Trust in Police (1-7)	551	4.272	1.600	1	5	7
Importance of Discrimination (1-7)	552	6.107	1.304	1	7	7
Amount (\$) Donated to BLM	553	12.607	19.018	0.000	5.000	100.000
Amount (\$) Donated to Other Organizations	550	87.652	18.470	0.000	95.000	100.000
Awareness of Social Justice Issues (1-7)	551	5.399	1.064	1	6	7
Importance of Social Justice Issues (1-7)	551	5.824	1.273	1	6	7
Support for Police Reform (1-7)	551	5.871	1.412	1	6	7
Average Support Index (1-7)	551	4.377	1.269	1.000	4.500	6.750
Support for BLM Mission (1-7)	551	5.220	1.843	1	6	7
Support for BLM Protest Methods (1-7)	551	4.421	2.052	1	5	7
Likelihood of Attending a BLM Protest (1-7)	551	3.595	2.190	1	4	7
Likelihood of a Peer Attending a BLM Protest (1-7)	551	4.120	1.995	1	4	7
Binary Outcome Variables:						
Significant Discrimination against Black people (0,1)	551	0.875	0.331			
Significant Discrimination against White People (0,1)	551	0.140	0.347			
Trusts Police (0,1)	551	0.710	0.454			
Discrimination is Important Issue (0,1)	552	0.940	0.237			
Any Donation to BLM (0,1)	553	0.524	0.500			
Informed about Social Justice Issues (0,1)	551	0.931	0.254			
Social Justice Issues are Important (0,1)	551	0.938	0.241			
Supports Police Reform (0,1)	551	0.922	0.268			
Supports BLM Mission and Methods (0,1)	551	0.768	0.423			
Supports BLM Mission (0,1)	551	0.838	0.368			
Supports BLM Protest Methods (0,1)	551	0.708	0.455			
Likely to Attend BLM Protest (0,1)	551	0.521	0.500			
Likely that Peer Attends BLM Protest (0,1)	551	0.635	0.482			

Continuous Outcome Variables include values 1-7, on a Likert Scale. See Appendix Section ?? for the full list of survey questions that correspond to these variables. Binary Outcome variables are coded as 1 if the corresponding continuous variable is greater than 3.5, and it is coded as 0 if not.

4.2.1 BLM Support across Treatments

The Black Lives Matter Support Index variable takes on values 1-7, with 1 corresponding to an individual strongly opposing BLM and 7 corresponding to an individual strongly supporting BLM. Figure 4 visualizes how the distribution of the support index value changes across treatment groups. For the gender treatment arm (Graph A), the histogram shows that respondents reading an article about a female victim of police violence instead of a male victim increases the frequency of higher support index values, like 5 and 6. These values correspond to mild and moderate support for BLM. Alternatively, within the context treatment arm (Graph B), respondents who received contextual information about police violence and BLM in the treatment report a higher frequency of lower support index values.

Figure 4: Histogram of Support for BLM by Treatment Group

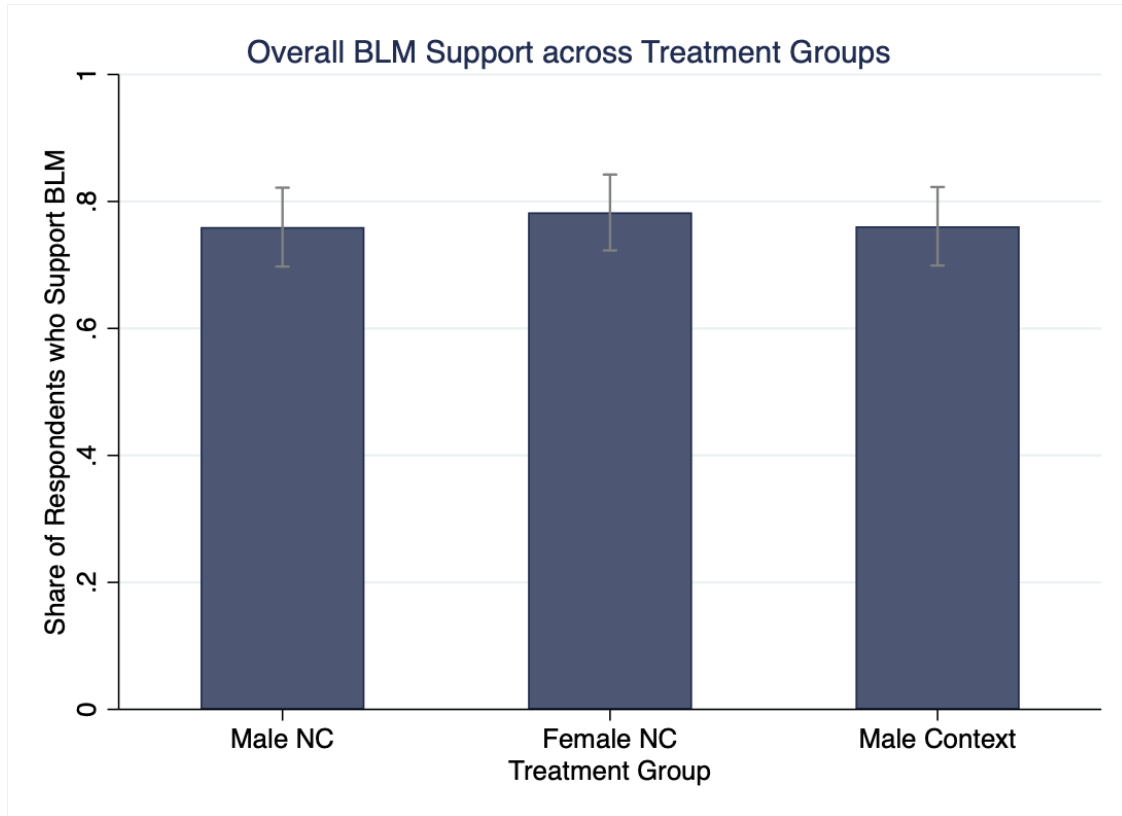


Notes: This figure plots the distribution of the average support index, *support_index*, for Black Lives Matter for each treatment arm (Gender and Context).

For better visualization of this variable, I construct a binary support indicator, *B_support_index*, that equals 1 when a respondent’s support index is greater than 3.5. Intuitively, this means that an individual expresses at least minor support for Black Lives Matter. The results’

trends are primarily consistent whether I conduct analyses using the overall index scale (1-7) or the binary support index, so I will report results using the binary support indicator for simplicity.

Figure 5: Overall BLM Support across Treatment Groups

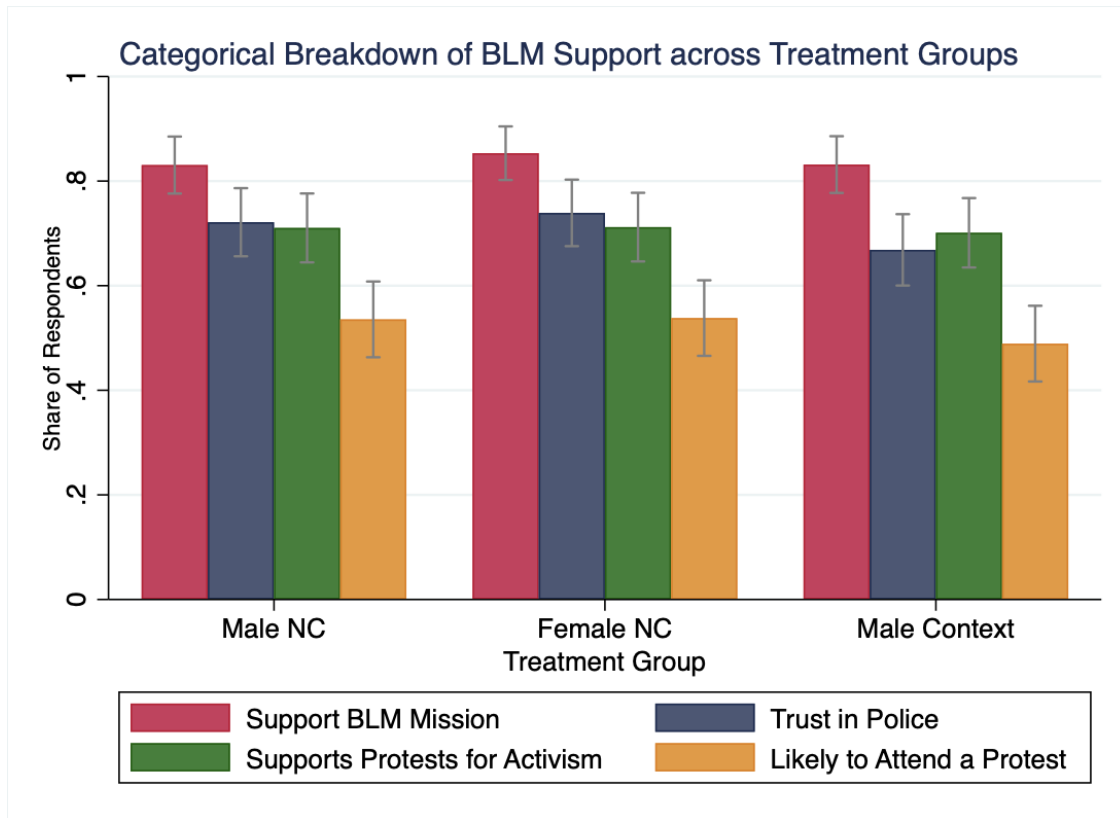


Notes: This figure plots a bar chart for the share of respondents in each treatment group who express any level support for Black Lives Matter. The binary support index corresponds to a respondent's average support index being greater than 3.5. The black vertical brackets represent the 95% confidence interval for the relevant variables.

Figure 5 shows that on average across all treatment groups, the highest share of respondents indicate support for Black Lives Matter when they receive the treatment article with a female victim report. 78% of respondents in the Female Victim with No Context treatment group report support for Black Lives Matter mission and methods. However, the difference in support between the Female NC group and other groups are insignificant, as the control (Male Victim without Context) and Context (Male Victim with Context) treatment groups both have 76% of respondents who support BLM. These results show that the overall

BLM support does not shift dramatically in response to the different treatment articles and that baseline BLM support is already high. Next, I consider if there are differences across treatment groups between the different components that make up the support index.

Figure 6: Categorical Breakdown of BLM Support across Treatment Groups



Notes: This figure plots a bar chart for the share of respondents in each treatment group who express any level of support for each of the four categories used to calculate the support index. The binary variable for each category corresponds to a respondent’s value for that belief being greater than 3.5. The black vertical brackets represent the 95% confidence interval for the relevant variables.

Figure 6 displays the small differences across treatment groups that exist in each of the four outcome variables that comprise the support index. The graph demonstrates the share of respondents who express at least minor agreement with beliefs about confidence in law enforcement, the mission of Black Lives Matter, and its accompanying methods. Interestingly, a strong majority of respondents across treatment groups express mild to extreme support for the mission of BLM (84%) and for protests as a general method of

activism (71%). However, only an average of 52% of respondents reported that they were at least somewhat likely to attend a Black Lives Matter protest themselves. The gap in likelihood of protest attendance and general BLM support serve as potential evidence for Cantoni et al. (2019) and Burtsztyn's (2020) notions that individual protest attendance depends on the actions of peers. Further analysis reveals that for respondents who report that they are likely to attend a BLM protest, 93% also report that their peers are likely to attend a BLM protest. Meanwhile, only 33% of respondents who are not likely to attend a BLM protest report that their peers are likely to attend.

4.2.2 Financial Support for BLM

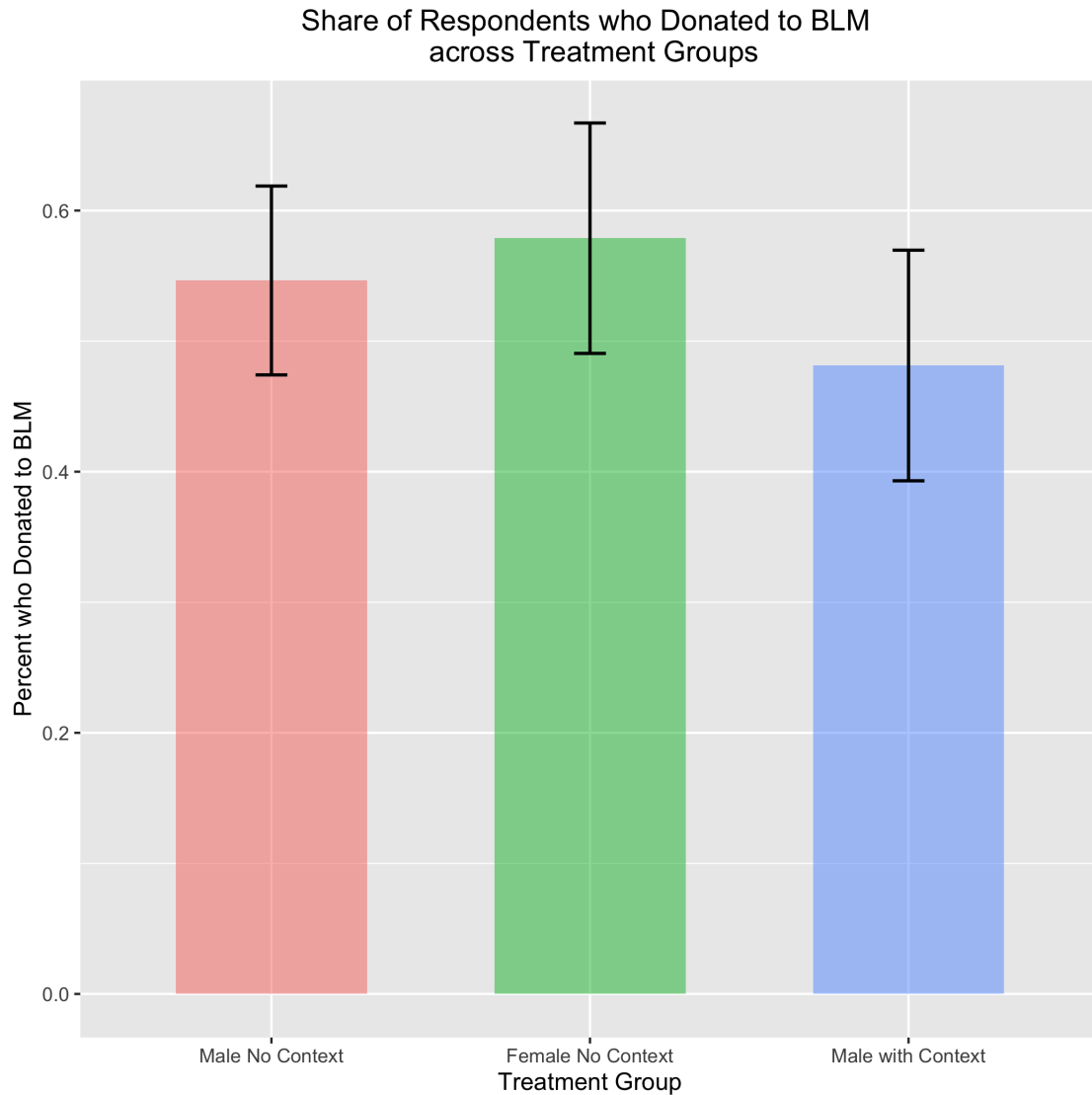
As another measure of Black Lives Matter support, the survey allows respondents to distribute a hypothetical donation of \$100 between several non-profits for social causes, including Black Lives Matter.

Figure 7 shows the share of respondents who allotted any of the \$100 to Black Lives Matter by treatment group. 55% of respondents in the control group donate to BLM, while 58% of respondents in the female victim treatment group and 48% of respondents in the context treatment group donate a nonzero amount to BLM. The mean donation amount to BLM was \$12.61 for all survey respondents. However, this figure factors in the large share of respondents who allocated \$0 to Black Lives Matter during the survey. With the subset of those who donated a nonzero amount to BLM, the mean donation amount was \$21.54 for the control group, \$25.78 for the male victim with context treatment group, and \$24.98 for the female victim with no context treatment group.

Figure 8 displays the frequency distributions of the donation amounts by treatment group. Respondents in the female no context group donated higher amounts of the \$100 to Black Lives Matter, indicating that the female victim treatment increases financial support for the BLM organization.

I conduct a two-sided t-test and there are no significant differences for the means of

Figure 7: Nonzero Donations to BLM by Treatment Groups

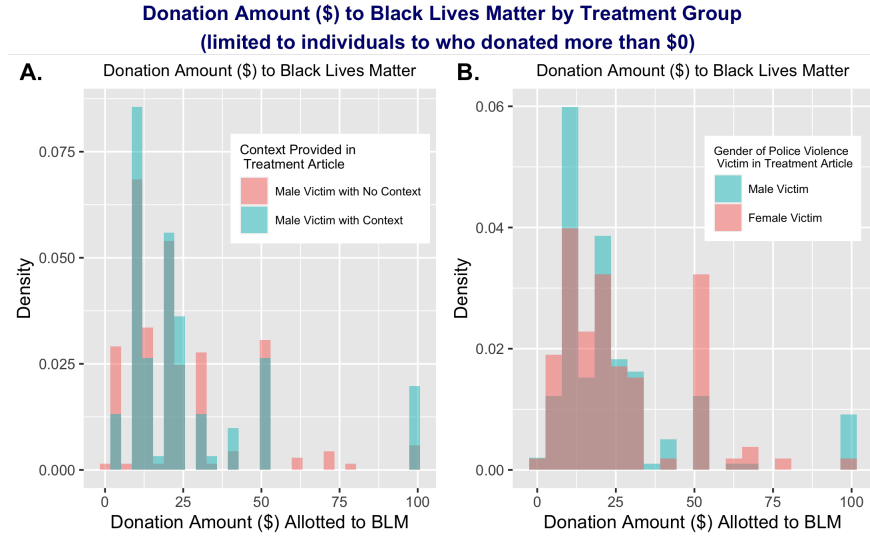


Notes: This figure plots the share of respondents in each treatment who donated a nonzero amount to Black Lives Matter during the hypothetical donation question in the survey. The black vertical brackets represent the 95% confidence interval for the relevant variables.

BLM donation amounts across treatment groups. This applies to the full set of respondents and to the subset of individuals who donated a nonzero amount to BLM. While the overall sample does not have significant differences in donation amounts across treatment groups, histograms of donation amounts stratified by different characteristics reveal that there may be differences in support for Black Lives Matter for different groups of people.

Figure 9 exemplifies the differences in financial support for Black Lives Matter by gender

Figure 8: Donation Amount (\$) to BLM by Treatment Group



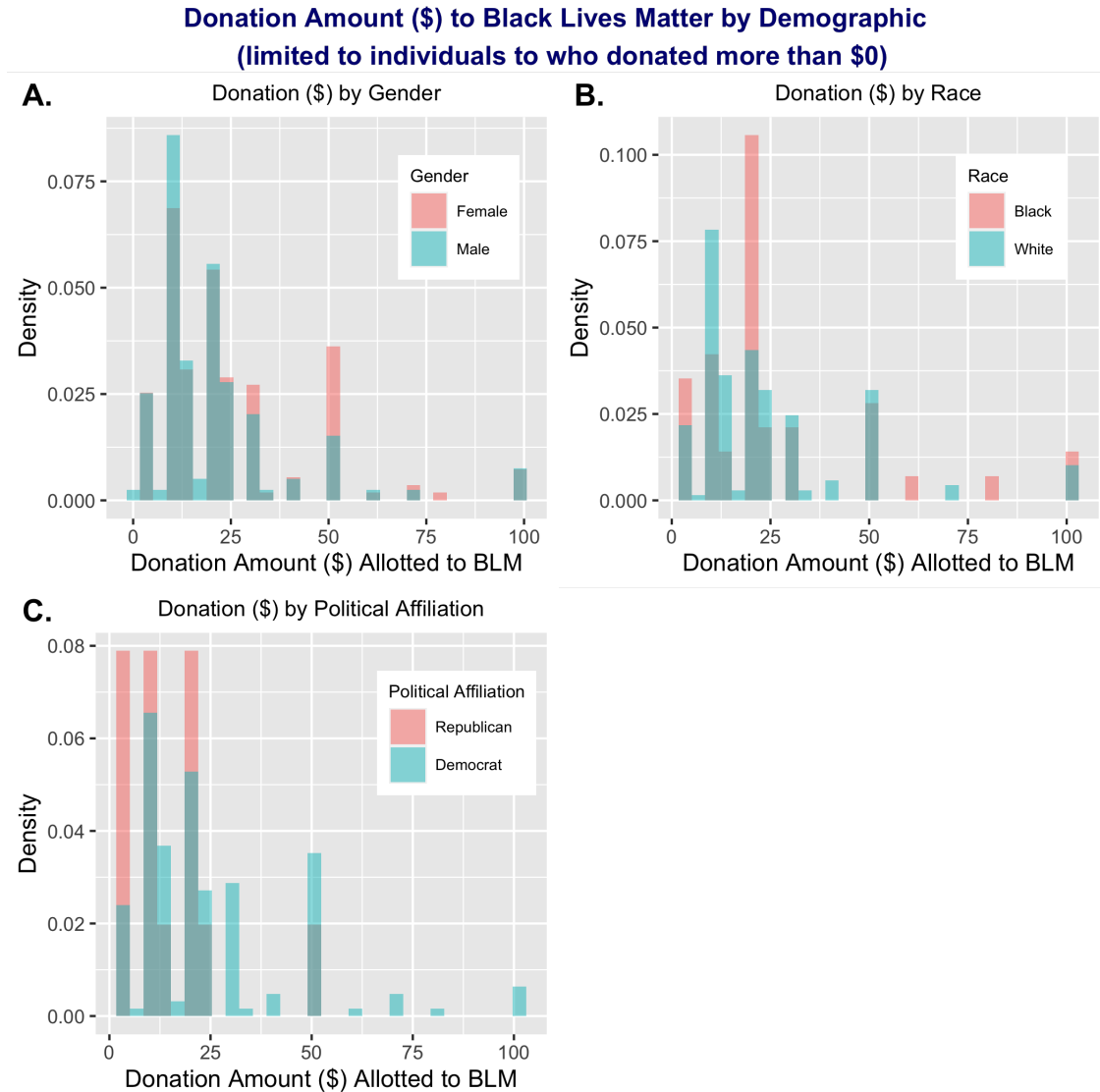
Notes: This figure displays the frequency distribution of the donation amounts (\$) to Black Lives Matter for each treatment group. Only respondents who donated a nonzero amount to BLM are included. The black vertical brackets represent the 95% confidence interval for the relevant variables.

(Graph B), race (Graph B), and political affiliation (Graph C). Male respondents donated less to BLM than female respondents on average (mean \$20.79 vs. \$18.04). Black and White respondents allot similar amounts for their donations (mean \$26.51 vs. \$24.10). In parallel with the comparison by gender, Republicans allot lower amounts of the donation to BLM than Democrats (mean \$15.33 vs. \$24.21). There is also less variation in the donation amounts for Republicans than there is for Democrats ($sd = 11.72$ vs. 19.09). From this figure, it is evident that differences exist in financial support for Black Lives Matter for respondents who fit certain characteristics.

4.3 BLM Support across Demographics

A breakdown of the general support for BLM index by demographics reveals that there are differences in support levels for respondents who identify with certain characteristics.

Figure 9: Donation Amount (\$) to BLM by Demographics

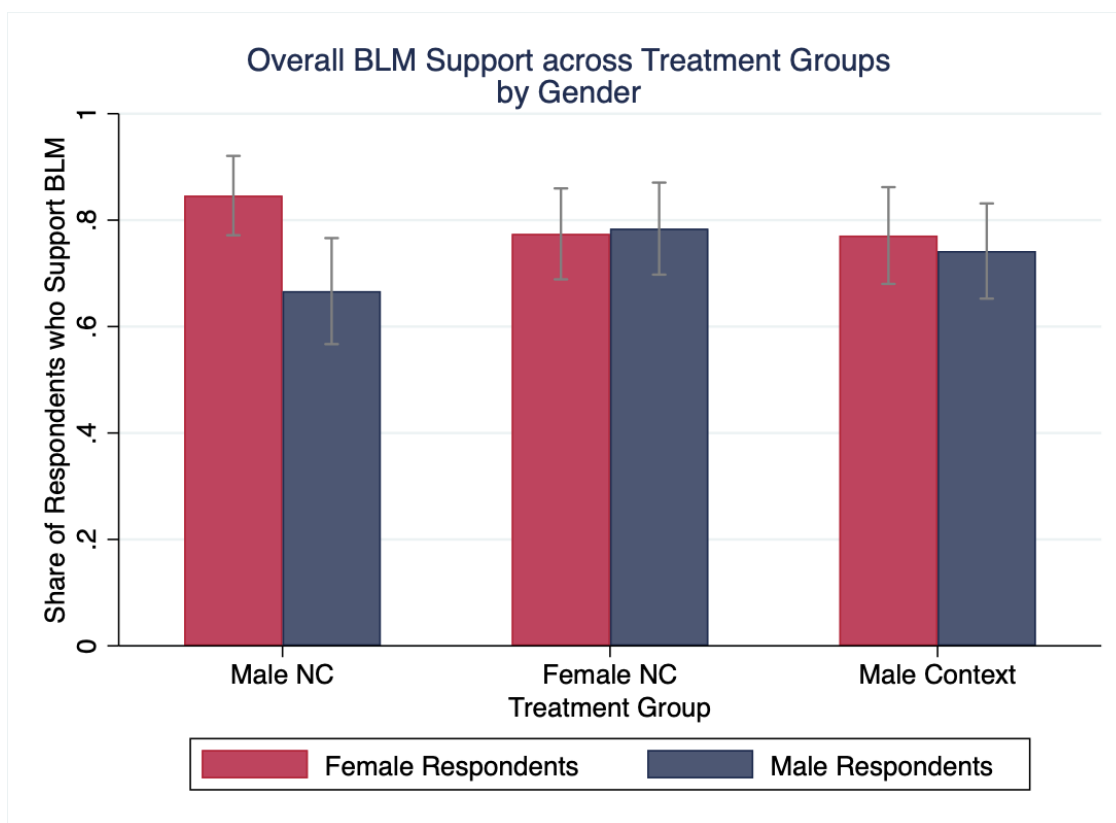


Notes: This figure displays the frequency distribution of the donation amounts (\$) to Black Lives Matter for different demographic groups in the sample (Gender, Race, and Political Affiliation). Only respondents who donated a nonzero amount to BLM are included. The black vertical brackets represent the 95% confidence interval for the relevant variables.

4.3.1 Gender

Figure 10 shows that, on average, female respondents report higher support for BLM than male respondents (80% support vs. 73% support). Female respondents report higher support levels for the control treatment than the gender and context treatment articles (84% support vs. 77% support for each treatment). Alternatively, male respondents report higher

Figure 10: Overall BLM across Treatment Groups by Gender



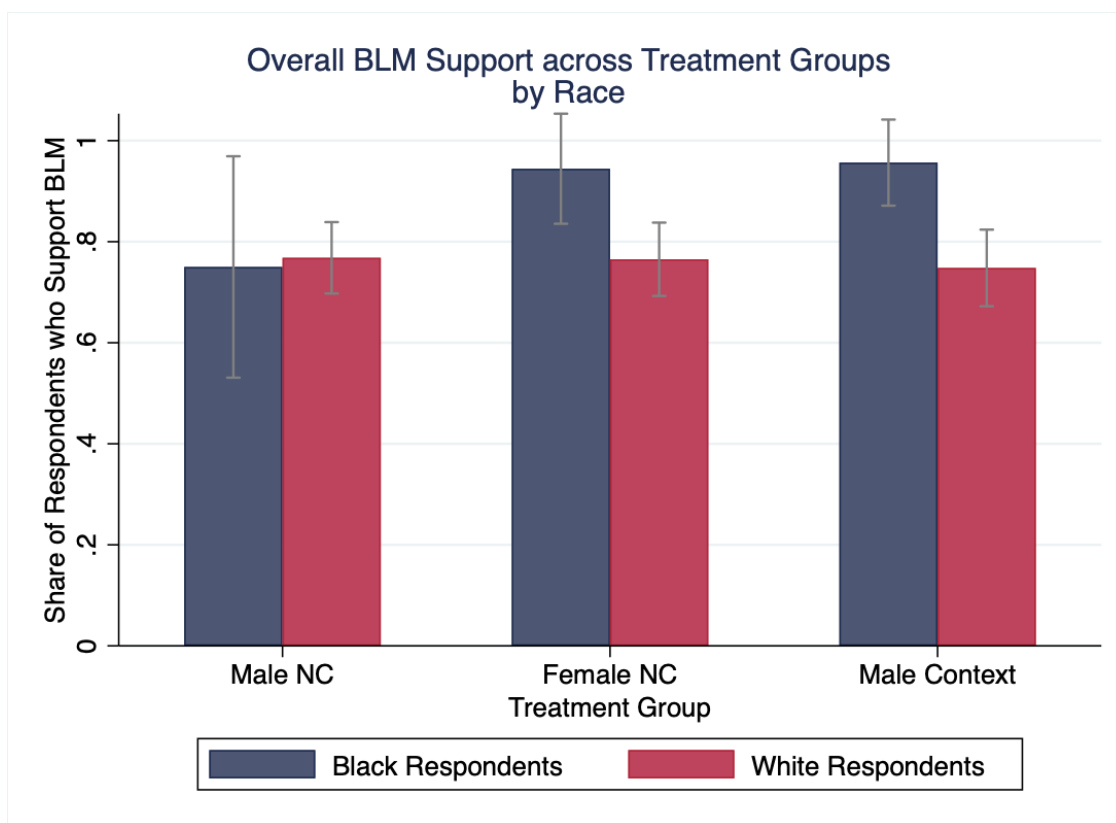
Notes: This figure plots a bar chart for the share of respondents in each treatment group who express any level support for Black Lives Matter, separated by Gender. The binary support index corresponds to a respondent's average support index being greater than 3.5. The black vertical brackets represent the 95% confidence interval for the relevant variables.

levels in both treatment groups than they did in the control group (67% support vs. 78% support for female victims and 77% support for context). The figure modeling support by gender of respondent shows that although male and female respondents have similar levels of support overall, the informational treatment results in different adjustments of support for each gender.

4.3.2 Race

Although the differences are not statistically significant, analysis between the support means of white and Black respondents indicate that, on average, Black respondents report higher support than white Respondents (89% support vs. 76% support). As Figure 11

Figure 11: Overall BLM across Treatment Groups by Race



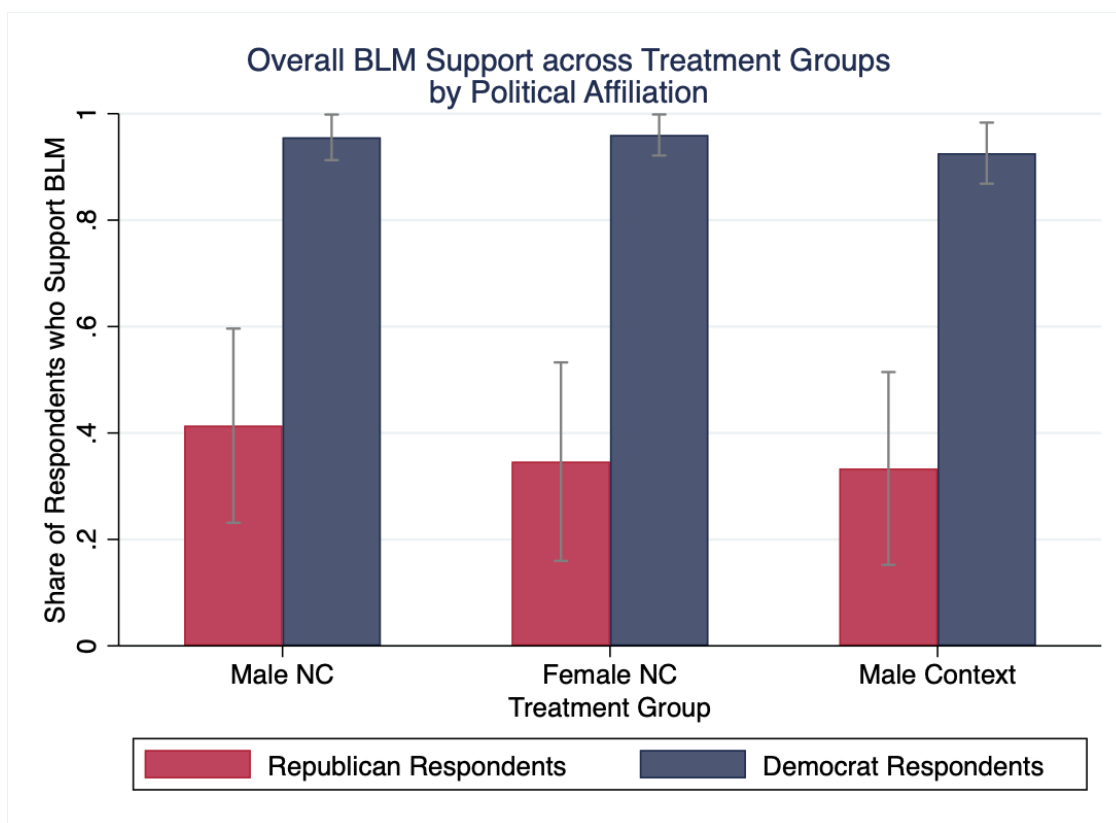
Notes: This figure plots a bar chart for the share of respondents in each treatment group who express any level support for Black Lives Matter, separated by Race. The binary support index corresponds to a respondent's average support index being greater than 3.5. The black vertical brackets represent the 95% confidence interval for the relevant variables.

illustrates, Black respondents have a large change in the share of individuals who support BLM for the female victim treatment (19 percentage point increase) and context treatment group (20 percentage point increase). However, due to the high level of variation in the responses for Black individuals, there is no significant difference between these levels of support.

4.3.3 Political Affiliation

On average, respondents who identify as Democrats report higher support indices than Republican respondents, regardless of the treatment that they receive. Figure 12 displays that the difference between political affiliations is striking, as 95% of Democrats support

Figure 12: Overall BLM across Treatment Groups by Political Affiliation



Notes: This figure plots a bar chart for the share of respondents in each treatment group who express any level support for Black Lives Matter, separated by Political Affiliation. The binary support index corresponds to a respondent's average support index being greater than 3.5. The black vertical brackets represent the 95% confidence interval for the relevant variables.

BLM but only 37% of Republicans. Democratic respondents report similar values across treatment groups, while Republicans report the highest level of support for the control group (-6 percentage point change for female victims and -8 percentage point change for the context treatment). Again, there is much higher variation in the responses from Republican respondents than in Democratic respondents.

The metrics for overall BLM support in Republicans are substantially lower than other demographic groups, so I also examine the other outcome variables while restricting the sample of analysis to the Republican population. In summary, the majority of Republicans believe that Black people experience significant discrimination and harassment by police due to their race (88%). 74% of Republicans also report that discrimination is an important issue

that needs to be addressed, but only 11% of Republicans allocate any of the \$100 hypothetical donation to the Black Lives Matter organization. One third of Republican participants support the BLM mission and its method, and a small share of Republican respondents (7.4%) report that they would personally attend a BLM protest. However, one pronounced outcome variable for Republican respondents is support for police reform, as 65% of Republican respondents support police reform in the control group. The female victim treatment increases the share of people who support concrete police reforms by 4 percentage points, and the context treatment increases support for police reforms by 13 percentage points. The concrete policy changes listed in the survey, such as banning chokeholds and mandating body cameras, are realistic initiatives that civilians can apply pressure on lawmakers to implement. Increased support for these reforms show how this small treatment can change civilian views on the policies. Further research could examine how more deliberate media treatments could impact real policy changes in law enforcement accountability.

4.4 Regression Results

I conduct an OLS regression analysis on the data to quantify the relationship between the media portrayal of a police violence event and support for BLM.

$$\text{Equation 1: } S_i = \beta_0 + \beta_1 \cdot \text{Female}_i + \beta_2 \cdot \text{Context}_i + \epsilon_i$$

Table 5 displays the regression results for the relationship between the treatment arms and overall support index. The table demonstrates the notion that neither the inclusion of BLM context nor the gender of the victim of violence cause significant differences in the overall support index value. In another regression, I find that the treatments also have no significant impacts on any of the individual components of the support index. The regression results provide another presentation of the previous findings. Overall differences between treatment groups are not significant; however, the demographic breakdown of BLM support suggests that specific demographic characteristics are associated with increased levels of BLM support. Further, treatment effect trends suggest that there may be different treatment effects for

Table 5: Regression Results: Overall Support Index

<i>Dependent variable:</i>	
Average BLM Support Index	
Context Provided	-0.085 (0.133)
Female Victim	0.089 (0.133)
Constant	4.376*** (0.094)
Observations	551
R ²	0.003
Adjusted R ²	-0.0005
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

See Appendix Section A.1 for full definitions of outcome variables.

different demographic groups. For this reason, I create a second regression specification that captures the interaction effects of the demographic characteristics of the respondents and the context and gender treatments.

4.4.1 Expansion of Regression

$$\begin{aligned}
 \text{Support Index}_i &= \beta_0 + \beta_1 \cdot \text{Demographic}_i + \beta_2 \cdot \text{Female Victim}_i \\
 &+ \beta_2 \cdot \text{Demographic}_i \cdot \text{Female Victim}_i \\
 &+ \beta_4 \cdot \text{Context}_i + \beta_5 \cdot \text{Demographic}_i \cdot \text{Context}_i
 \end{aligned} \tag{2}$$

$$\begin{aligned}
 \text{Binary Support Index}_i &= \beta_0 + \beta_1 \cdot \text{Demographic}_i + \beta_2 \cdot \text{Female Victim}_i \\
 &+ \beta_2 \cdot \text{Demographic}_i \cdot \text{Female Victim}_i \\
 &+ \beta_4 \cdot \text{Context}_i + \beta_5 \cdot \text{Demographic}_i \cdot \text{Context}_i
 \end{aligned} \tag{3}$$

One coefficient of interest in Equation 2 is β_2 , which is the effect of receiving the female victim treatment if participant i does not identify with the specified characteristic. $\beta_2 + \beta_3$

shows the effect of receiving the female victim article treatment for participant i who fits into the demographic characteristic. Similarly, β_4 is the effect of receiving the context treatment if participant i does not identify with the specified characteristic. $\beta_4 + \beta_5$ shows the effect of receiving the context article treatment for participant i who fits into the demographic characteristic. The interpretation of the coefficients in Equation 3 is the same as Equation 2, but the dependent variable is the share of respondents who express at least mild support for BLM.

In order to identify potential covariates to place in this specification, I run a multivariate regression on all potential demographic variables. From this analysis, I find that, holding all other covariates constant, respondent gender, age, and political affiliation have statistically significant relationships with an average BLM support index. Additionally, the indicators for a respondent having less than a high school education, residing in the West region of the United States, and being non-white, non-Black, and non-Asian have statistically significant relationships with the index outcome variable. The full results of these regression are included in the Appendix Section 11.

I run an OLS regression analysis to fit the specification 2 using the covariates identified as statistically significant in the multivariate regression. As shown in Table 6, all of the covariates have noteworthy coefficients on the demographic term alone, except for the indicator for an individual's race not being non-white, non-Black, and non-Asian.

Column (2) of Table 6 displays the only covariate that has statistically significant interaction with the treatments. Specifically, male respondents who receive the female treatment increase their overall BLM support index by $\beta_2 + \beta_3 = 0.310$. Likewise, male respondents who receive the context treatment increase the overall BLM support index by $\beta_4 + \beta_5 = 0.178$. The specification for the binary support indicator in Equation 3 provides a more intuitive interpretation of these effects. According to the regression from Equation 3, there is a 11.7 percentage point increase in the share of respondents who support BLM for male respondents who receive the female victim treatment. There is a 7.5 percentage point increase in

the share of respondents who support BLM for male respondents who receive the context treatment. See Appendix Section 11 for a full table for Specification 2 Binary Results. These results indicate that the male population is a particularly relevant population to target for further research into the motivations for support of BLM, especially through the lens of media.

Table 6: Specification 2 Regression Results

	<i>Dependent variable:</i>					
	Average BLM Support Index					
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Context Provided (0,1)	-0.085 (0.133)	-0.310 (0.190)	-0.387 (0.304)	-0.113 (0.160)	-0.035 (0.137)	-0.082 (0.133)
Male Respondent (0,1)		-0.711*** (0.188)				
Age (Years)			-0.237*** (0.062)			
Democrat (0,1)				1.165*** (0.166)		
Race Other than White, Black, and Asian (0,1)					-0.472 (0.392)	
Less than HS Education (0,1)						-2.137* (1.270)
Treatment: Female Victim (0,1)	0.089 (0.133)	-0.196 (0.185)	0.094 (0.298)	0.056 (0.169)	0.100 (0.137)	0.084 (0.133)
Context x Male		0.483* (0.267)				
Female Victim x Male		0.556** (0.265)				
Context x Age			0.096 (0.092)			
Female Victim x Age			0.007 (0.087)			
Context x Democrat				0.196 (0.235)		
Female Victim x Democrat				-0.053 (0.234)		
Context x Other Race					-0.327 (0.502)	
Female Victim x Other Race					-0.016 (0.519)	
Context x Less HS Education						0.832 (1.557)
Female Victim x Less HS Education						1.541 (1.557)
Constant	4.376*** (0.094)	4.725*** (0.132)	5.094*** (0.209)	3.804*** (0.117)	4.404*** (0.096)	4.387*** (0.094)
Observations	551	535	551	550	551	551
R ²	0.003	0.033	0.060	0.231	0.021	0.013
Adjusted R ²	-0.0005	0.023	0.052	0.224	0.012	0.004

Note:

*p<0.1; **p<0.05; ***p<0.01

5 Conclusion

In this paper I utilize an online survey platform to expose participants to different media portrayals of a fictitious police violence episode and to elicit beliefs about perceptions of law enforcement, social justice, and Black Lives Matter. The results of my study address the gap in literature about engagement with the BLM Movement in the United States in relation to media. I find that at a broad population scale, providing participants with context about the Black Lives Matter movement in an internet article about a police killing does not cause large differences in people’s overall support for BLM. Likewise, the gender of the victim of police violence does not dramatically alter people’s beliefs about BLM and related causes. Strikingly, while 76% of respondents indicate support for BLM following the treatment, only 52% of respondents report that they would personally attend a BLM protest.

Haaland and Roth (2019) point out this dissociation between beliefs on perceptions of discrimination and support for concrete actions to reform them. One potential mechanism for the trends in my results is the notion that support for BLM arises from preconceived beliefs and not reactions to media sources. This hypothesis would explain why the differences in BLM support across treatment groups in my study are small. Miller et al. (2021) synthesize this argument in a study that correlated predictor measures of social justice and perceptions of racism with Black Lives Matter support. They find that conceptualizations of racism are the most indicative of an individual’s support for BLM (Millet et al., 2021). These findings present a platform upon which to further investigate how these perceptions of racism derive from media sources.

Given the frequently divisive nature of the media’s portrayal of Black Lives Matter, one might expect that more liberal individuals will support the movement, while more conservative individuals may oppose it. Updegrove et al. (2020) conclude that older, Republican, and conservative men are more likely to oppose BLM during a study to identify predictors of opposition for BLM (Updegrove et al., 2020). My findings mirror these results, as I find that the average BLM support index significantly decreases as respondent age increases.

Further, Republican respondents have an average of 58 percentage points fewer individuals who express support for Black Lives Matter. Female respondents have higher support levels than male respondents, and Black respondents have higher levels of support than white individuals.

Beyond the differences between demographic groups in their baseline support measures, I also find variation in how specific demographic groups respond to the context and gender media treatments. Although noisy data did not designate statistical significance, trends suggest that female respondents weaken support when media coverage includes additional context and when the police violence victim is female. Alternatively, male respondents increase their support. Black respondents increase support when exposed to the context and gender treatments, while white respondents have stable support levels across treatment groups. A respondent being male has a significant interaction with the increased support from both the context and gender treatments.

My results point to my survey design being an effective method of measuring and altering beliefs about Black Lives Matter. The variation in the data across the respondents implies that respondents are understanding the questions and responding accordingly. In other words, individuals did not simply select the midpoint answer consistently without considering differences in their beliefs for different questions. Also, the trends in BLM support differences across demographic groups align with those that result from other polling surveys using similar methodologies. This suggests that I am indeed capturing informative data from my survey. According to my results, women support BLM more than men, Black and white respondents support BLM at similar levels, and Democrats support BLM more than Republicans.

Regarding racial division, previous research has shown that a higher level of Black Americans tend to express support for the Black Lives Matter movement than white Americans (Parker et al., 2020). Although my results do not indicate a statistically significant difference between these groups, the measures of support for Black and white respondents are

similar to what other surveyors have found. In a Pew Research Center survey of Americans' attitudes toward demonstrations, Parker et al. (2020) find that 86% of Black Americans at least somewhat support the Black Lives Matter Movement, while 60% of white Americans support the movement. These metrics align with my experimental results that 89% of Black individuals and 76% of white individuals support Black Lives Matter. From a partisan standpoint, Horowitz (2021) finds that there are large disparities in BLM movement support across political parties, with 19% of Republicans and 85% of Democrats expressing support for BLM. My results mirror these stark contrasts between parties, with 37% of Republicans and 95% of Democrats expressing support for BLM respectively. While these findings are not directly comparable due to differences in methodology across surveys, I observe that the trends in BLM support are similar for different demographic groups.

Given that my methodology does seem to elicit meaningful responses, why might I fail to observe a statistically significant treatment effect? It may be that beliefs are too deeply-held to be shifted by a brief, one-time intervention. Research has found that beliefs on social and political issues can often be deep-rooted, so people may require more frequent or longer interventions to update their beliefs. Past research points to the inelasticity of racial beliefs. In a survey examining attitudes towards racial discrimination, Miller et al. (2021) find that differences in perceptions of racism predict support for movements aimed at lessening racial inequality. They find that white people are more likely to perceive racism as an individualistic concept, in which they conceptualize racism as isolated acts of bigotry (Miller et al., 2021). This allows individuals to maintain a self-image that is separate from racist individuals and to deny the impact of white privilege. Since this view of racism provides a way for them to avoid accountability for their role in systemic racism, white individuals may choose to maintain the individualistic conceptualization of racism, which Miller et al. link to lower support for Black Lives Matter. This study exemplifies how support for a social movement, such as Black Lives Matter, can derive from an individual's personal impressions of racial beliefs. Additionally, Stangor et al. (2001) find that European American participants in a

belief elicitation study maintain their beliefs about African Americans based on what they learn about the racial beliefs of others. Specifically, if one receives information that others affirm one's own racial stereotypes, one becomes less likely to change those stereotypes (Stangor et al., 2001). In this way, when people surround themselves with like-minded individuals, their beliefs on discrimination and stereotypes will be more steadfast. This research exemplifies how social groups can foster inelastic beliefs on race.

This paper contributes to the growing assortment of existing literature regarding beliefs about social justice, discrimination, and law enforcement principles and reform. Particularly, my work contributes to the gap in literature that identifies the specific parts of media portrayals that incite support or disapproval of Black Lives Matter. I identify the male population of the United States as particularly susceptible to changing its views on BLM based on receiving context for BLM within a police killing or by learning about a female victim of police violence. Further, I provide an example of the way a small media treatment can adjust civilian views of policy reform. Unfortunately, violence against women have not garnered significant attention historically. My study presents an added incentive for media outlets and activities to highlight the stories of female victims of police violence, if not to bring the injustices of the individual victims to light, then to garner more support for a cause that desperately needs attention and reform. As media is a crucial method of disseminating information through our society, further research could examine other mechanisms of media portrayal that provoke support for Black Lives Matter from additional target audiences.

References

- [1] Charles Stangor, Gretchen B. Sechrist, and John T. Jost. “Changing Racial Beliefs by Providing Consensus Information”. en. In: *Personality and Social Psychology Bulletin* 27.4 (Apr. 2001). Publisher: SAGE Publications Inc, pp. 486–496. ISSN: 0146-1672. DOI: 10.1177/0146167201274009. URL: <https://doi.org/10.1177/0146167201274009> (visited on 03/23/2022).
- [2] Claes de Vreese and Hajo Boomgaarden. “Valenced news frames and public support for the EU”. en. In: *Communications* 28.4 (Jan. 2003). ISSN: 0341-2059, 1613-4087. DOI: 10.1515/comm.2003.024. URL: <https://www.degruyter.com/document/doi/10.1515/comm.2003.024/html> (visited on 12/08/2021).
- [3] James H. Price et al. “Power Analysis in Survey Research: Importance and Use for Health Educators”. en. In: *American Journal of Health Education* 36.4 (Aug. 2005), pp. 202–209. ISSN: 1932-5037, 2168-3751. DOI: 10.1080/19325037.2005.10608185. URL: <https://www.tandfonline.com/doi/full/10.1080/19325037.2005.10608185> (visited on 12/10/2021).
- [4] Alan Schussman and Sarah A. Soule. “Process and Protest: Accounting for Individual Protest Participation”. In: *Social Forces* 84.2 (Dec. 2005), pp. 1083–1108. ISSN: 0037-7732. DOI: 10.1353/sof.2006.0034. URL: <https://doi.org/10.1353/sof.2006.0034> (visited on 03/23/2022).
- [5] Blake C. Andrew. “Media-generated Shortcuts: Do Newspaper Headlines Present Another Roadblock for Low-information Rationality?” In: *Harvard International Journal of Press/Politics* 12.2 (Apr. 2007). Publisher: SAGE Publications, pp. 24–43. ISSN: 1081-180X. DOI: 10.1177/1081180X07299795. URL: <https://doi.org/10.1177/1081180X07299795> (visited on 12/08/2021).
- [6] Daniel John Zizzo. “Experimenter demand effects in economic experiments”. en. In: *Experimental Economics* 13.1 (Mar. 2010), pp. 75–98. ISSN: 1386-4157, 1573-6938. DOI:

- 10.1007/s10683-009-9230-z. URL: <http://link.springer.com/10.1007/s10683-009-9230-z> (visited on 02/15/2022).
- [7] Catherine Brown. *Patterns of Protest: Trajectories of Participation in Social Movements on JSTOR*. en. 2012. URL: <http://www.jstor.org/stable/j.ctvqsf0w4> (visited on 10/29/2021).
- [8] Reena Flores. *Donald Trump: Black Lives Matter calls for killing police*. en-US. July 2016. URL: <https://www.cbsnews.com/news/donald-trump-black-lives-matter-calls-for-killing-police/> (visited on 11/24/2021).
- [9] Camille J. Hochheimer et al. “Methods for Evaluating Respondent Attrition in Web-Based Surveys”. EN. In: *Journal of Medical Internet Research* 18.11 (Nov. 2016). Company: Journal of Medical Internet Research Distributor: Journal of Medical Internet Research Institution: Journal of Medical Internet Research Label: Journal of Medical Internet Research Publisher: JMIR Publications Inc., Toronto, Canada, e6342. DOI: 10.2196/jmir.6342. URL: <https://www.jmir.org/2016/11/e301> (visited on 03/22/2022).
- [10] Keon West and Joda Lloyd. “The Role of Labeling and Bias in the Portrayals of Acts of “Terrorism”: Media Representations of Muslims vs. Non-Muslims”. en. In: *Journal of Muslim Minority Affairs* 37.2 (Apr. 2017), pp. 211–222. ISSN: 1360-2004, 1469-9591. DOI: 10.1080/13602004.2017.1345103. URL: <https://www.tandfonline.com/doi/full/10.1080/13602004.2017.1345103> (visited on 11/22/2021).
- [11] Yossi David. “Gendering Political Conflict: Gender Perceptions and Public Opinion in the Israeli-Palestinian Conflict”. PhD thesis. Sept. 2018. DOI: 10.13140/RG.2.2.32961.48481.
- [12] Ingar Haaland and Christopher Roth. *Beliefs about Racial Discrimination and Support for Pro-black Policies*. en. SSRN Scholarly Paper ID 3039629. Rochester, NY: Social

- Science Research Network, Feb. 2019. DOI: 10.2139/ssrn.3039629. URL: <https://papers.ssrn.com/abstract=3039629> (visited on 05/07/2021).
- [13] Larry Buchanan, Quoc Trung Bui, and Jugal K. Patel. “Black Lives Matter May Be the Largest Movement in U.S. History”. en-US. In: *The New York Times* (July 2020). ISSN: 0362-4331. URL: <https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-crowd-size.html> (visited on 11/24/2021).
- [14] Jeffrey Jones. *Black, White Adults’ Confidence Diverges Most on Police*. en. Section: Social & Policy Issues. Aug. 2020. URL: <https://news.gallup.com/poll/317114/black-white-adults-confidence-diverges-police.aspx> (visited on 12/10/2021).
- [15] Justin McCarthy and Steven Long. *Two in Three Americans Support Racial Justice Protests*. en. Section: Politics. July 2020. URL: <https://news.gallup.com/poll/316106/two-three-americans-support-racial-justice-protests.aspx> (visited on 12/04/2021).
- [16] Dhrumil Mehta. *National Media Coverage Of Black Lives Matter Had Fallen During The Trump Era — Until Now*. en-US. June 2020. URL: <https://fivethirtyeight.com/features/national-media-coverage-of-black-lives-matter-had-fallen-during-the-trump-era-until-now/> (visited on 11/23/2021).
- [17] Kim Parker, Juliana Menasce Horowitz, and Monica Anderson. *Majorities Across Racial, Ethnic Groups Express Support for the Black Lives Matter Movement*. en-US. June 2020. URL: <https://www.pewresearch.org/social-trends/2020/06/12/amid-protests-majorities-across-racial-and-ethnic-groups-express-support-for-the-black-lives-matter-movement/> (visited on 12/10/2021).
- [18] Reuters. “Factbox: Corporations pledge \$1.7 billion to address racism, injustice”. en. In: *Reuters* (June 2020). URL: <https://www.reuters.com/article/uk-minneapolis-police-pledges-factbox-idUKKBN23H06S> (visited on 03/20/2022).

- [19] Jessica Shaer. *Oklahoma Highway Patrol investigating a fatal shooting in which a trooper shot and killed a man near Vinita*. en-US. June 2020. URL: <https://www.fourstateshomepage.com/news/oklahoma-highway-patrol-investigating-a-fatal-shooting-in-which-a-trooper-shot-and-killed-a-man-near-vinita/> (visited on 11/24/2021).
- [20] Alexander H. Updegrove et al. “Red States and Black Lives: Applying the Racial Threat Hypothesis to the Black Lives Matter Movement”. In: *Justice Quarterly* 37.1 (Jan. 2020). Publisher: Routledge _eprint: <https://doi.org/10.1080/07418825.2018.1516797>, pp. 85–108. ISSN: 0741-8825. DOI: 10.1080/07418825.2018.1516797. URL: <https://doi.org/10.1080/07418825.2018.1516797> (visited on 03/08/2022).
- [21] Alberto Alesina, Matteo F Ferroni, and Stefanie Stantcheva. “Perceptions of Racial Gaps, their Causes, and Ways to Reduce Them”. en. In: (2021), p. 149.
- [22] Leonardo Bursztyrn et al. “Persistent Political Engagement: Social Interactions and the Dynamics of Protest Movements”. en. In: *American Economic Review: Insights* 3.2 (June 2021), pp. 233–250. ISSN: 2640-205X, 2640-2068. DOI: 10.1257/aeri.20200261. URL: <https://pubs.aeaweb.org/doi/10.1257/aeri.20200261> (visited on 11/24/2021).
- [23] Myrna Cintron. “Invisible no more police violence against black women and women of color, by”. In: *Journal of Ethnicity in Criminal Justice* 19.3-4 (Oct. 2021). Publisher: Routledge _eprint: <https://doi.org/10.1080/15377938.2021.1976530>, pp. 339–346. ISSN: 1537-7938. DOI: 10.1080/15377938.2021.1976530. URL: <https://doi.org/10.1080/15377938.2021.1976530> (visited on 12/10/2021).
- [24] Omeed S. Ilchi and James Frank. “Supporting the Message, Not the Messenger: The Correlates of Attitudes towards Black Lives Matter”. en. In: *American Journal of Criminal Justice* 46.2 (Apr. 2021), pp. 377–398. ISSN: 1066-2316, 1936-1351. DOI: 10.

- 1007/s12103-020-09561-1. URL: <https://link.springer.com/10.1007/s12103-020-09561-1> (visited on 11/24/2021).
- [25] Stuart S. Miller, Conor J. O’Dea, and Donald A. Saucier. ““I can’t breathe”: Lay conceptualizations of racism predict support for Black Lives Matter”. en. In: *Personality and Individual Differences* 173 (Apr. 2021), p. 110625. ISSN: 01918869. DOI: 10.1016/j.paid.2020.110625. URL: <https://linkinghub.elsevier.com/retrieve/pii/S0191886920308163> (visited on 11/24/2021).
- [26] Periloux C. Peay and Tyler Camarillo. “No Justice! Black Protests? No Peace: The Racial Nature of Threat Evaluations of Nonviolent #BlackLivesMatter Protests”. en. In: *Social Science Quarterly* 102.1 (2021). eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/ssqu.12902> pp. 198–208. ISSN: 1540-6237. DOI: 10.1111/ssqu.12902. URL: <http://onlinelibrary.wiley.com/doi/abs/10.1111/ssqu.12902> (visited on 11/24/2021).
- [27] Elisa Shearer. *86% of Americans get news online from smartphone, computer or tablet.* en-US. Jan. 2021. URL: <https://www.pewresearch.org/fact-tank/2021/01/12/more-than-eight-in-ten-americans-get-news-from-digital-devices/> (visited on 03/22/2022).
- [28] *2020 Police Violence Report.* en. URL: <https://policeviolencereport.org> (visited on 12/10/2021).
- [29] *About.* en-US. URL: <https://blacklivesmatter.com/about/> (visited on 11/24/2021).
- [30] William Barrett. *America’s Top 100 Charities 2021.* URL: <https://www.forbes.com/lists/top-charities/?sh=17909d615f50> (visited on 01/18/2022).
- [31] *Civiqs — Black Lives Matter.* URL: https://civiqs.com/results/black_lives_matter?annotations=true&uncertainty=true&zoomIn=true&trendline=true&startDate=&endDate=&utm_campaign=embed&embedDate=1638489600000 (visited on 12/04/2021).
- [32] *SAY HER NAME.* en. URL: <https://www.aapf.org/sayhername> (visited on 12/10/2021).

- [33] *Scholarly Articles on Black Lives Matter: History & More*. en. URL: <https://www.gale.com/open-access/black-lives-matter> (visited on 03/23/2022).
- [34] *U.S. Census Bureau QuickFacts: United States*. en. URL: <https://www.census.gov/quickfacts/fact/table/US/LFE046219> (visited on 03/05/2022).

A Appendix

A.1 Variable Definitions

- Time for Survey Completion is a continuous variables that measures the total time (min) that respondents spent on the survey.
- Male is a binary variable that equals 1 if the respondent identifies as male and 0 if the respondent identifies as female.
- Age is a continuous variable calculated by assigning each respondent to the median age of the age bucket which the participant selected. The maximum age used for the oldest age bracket is 79, the average life expectancy in the US.
- Household Family Income is a continuous variable calculated by assigning each respondent to the median income of the income bracket which the participant selected. The maximum income employed in the continuous household income variable is \$500,000, and this bracket only included 4 observations.
- The Ethnicity and Race binary variables are coded as 1 if the respondent identifies with the specific Ethnicity or Race listed, and 0 if the respondent does not. Other Race is a binary variable that equals 1 if the respondent identifies as Black and 0 if the respondent identifies as American Indian, Alaska Native, Native Hawaiian, Pacific Islander, or mixed race.
- The Region binary variables are coded as 1 if the respondent lives in the corresponding region and as 0 if not. Regions defined as such: Midwest (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI), Northeast (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT), West (AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY), Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV), and Southwest (AZ, NM, OK, TX).

- The neighborhood description binary variables (Rural, Urban, and Suburban) are coded as 1 if the respondents' residential area is best described by the corresponding descriptor and are coded as 0 if not.
- The Education binary variables are coded as 1 if the respondent satisfies the corresponding level of education and are coded as 0 otherwise.
- The Political Affiliation binary variables are coded as 1 if the respondent identifies with a specific political affiliation and are coded as 0 otherwise. Other Political Affiliation is a binary variable that equals 1 if the respondent identifies with a political affiliation other than Republican or Democrat and 0 if the respondent does not.

A.2 Power Calculations

Without direct measurements of pre-treatment support for Black Lives Matter, I use surveys from common data collection sites to construct an index variable for an individual's level of support. I utilize estimates for this index variable in a power calculation to determine an adequate sample size for the study. The sample size of the study was obtained by considering a power analysis for both arms of the two treatment groups: gender and context inclusion. I use an ideal power of 0.9 ($\beta = 0.1$) and p-value for statistical significance of 0.5 ($\alpha = 0.05$). Conventionally, a statistical power of at least 0.8 is ideal, and I am raising that power to 0.9 for additional ability to detect differences among the groups in the study (Price et al., 2005).

Regarding the gender treatment of the study, I initially attempted to estimate the treatment effect for the gender by drawing conclusions from past research on the differences in empathy towards men and women. By examining the influence of gender perceptions on the public opinion of the Israeli-Palstinian conflict, David (2018) found that the characterization of Palestinians or Jewish-Israelis by traditionally feminine traits is associated with increased or decreased empathy towards Palestinians, respectively (David, 2018). This find-

ing exemplifies how gender perceptions play a role in support for political movements. In David’s research, female stereotypes result in increased empathy towards a specific political group. In my work, this principle could signify that a female victim might elicit a greater level of support for the Black Lives Matter movement. However, based on the historical silencing of violences against Black women and femmes, I do not accept the implications of David’s results as the mechanism for my survey. Due to these confounding propositions, I am not calculating a separate power calculation for the expected means from differences in the gender treatments. Instead, I will use the same estimated sample size needed for the context treatment groups.

For the context arm of the treatment, I use surveys from prominent research sites that collect data on Americans’ opinions on political and social issues. These polling centers include Gallup, FiveThirtyEight, and Pew Research Center. I selected these specific organizations because they have recent survey results on perceptions of Black Lives Matter and racial injustice in the United States, particularly with data collected in 2020 and 2021. A survey by Pew research center reported that 60% of White Americans supported BLM in the summer of 2020 (Parker et al., 2020). According to a Gallup poll in 2020, 56% of White Americans have “a great deal” or “quite a lot” of confidence in the police. Inverting this metric, I will conclude that 44% of White Americans do not have sufficient confidence in police (Jones, 2020). Another study found that 49% of White Americans believed that protests would help grow support for the Black Lives Matter movement (McCarthy and Long, 2020). They also report that 10% of White Americans participated in a BLM protest in 2020. From these metrics that correspond to the four outcome variables, I will convert the percentages of American support to corresponding values from 1 to 5 and average them. The resulting mean for pre-treatment BLM support is 2.16 ($sd = 0.712$).

Estimating the index mean for the post-treatment context group in my survey requires more creativity. Without previous literature that makes the quantitative estimate for a change in support for BLM support following exposure to media with context, I will utilize

previous research that employs similar methods in another field. Vreese and Boomgarden (2018) found a 0.41 increase in support for European Union (EU) enlargement on a 7-point scale when study participants received a treatment that included context of EU enlargement. Using a linear translation, the parallel results from Vreese and Boomgarden correspond to a 0.293 increase proportionally on the 5-point scale that my survey employs. From this treatment effect, I am estimating that the mean support index variable for those who received the context treatment is $2.16 + 0.293 = 2.45$ ($sd = 0.8$).

Table 7: Power Calculation: Estimated Baseline Values

Baseline Variable	Calculation
Support for the principles of the Black Lives Matter movement:	$0.60 * 5 = 3.0$
Confidence in police:	$0.44 * 5 = 2.2$
Support for BLM Protests Method:	$0.49 * 5 = 2.45$
Likelihood of Attending Protest:	$0.10 * 5 = 1.0$
Average BLM Support Index:	2.16

Notes: The calculated standard deviation is 0.712

Using the computational power calculator G*Power , I ran an ANOVA F-test to obtain a total sample size needed for the desired effect size of 0.293, power of 0.90, and three treatment groups. From these power calculations, the study requires 172 respondents for each of the three treatment groups. This results in a total of $172 * 3 = 516$ participants, which I raised to 550 to account for potential survey attrition.

A.3 Balance Tests

Table 8: Balance Test: Context vs No Context

	Obs-No Context	No Context Mean	Obs- Context	Context Mean	Difference
Male	359	0.487	176	0.528 (0.046)	0.041
Age (in years)	367	39.775	184	38.448 (1.340)	-1.327
Hispanic, Latinx, or Spanish	368	0.114	185	0.092 (0.027)	-0.022
White	350	0.771	174	0.730 (0.041)	-0.042
Black	350	0.097	174	0.132 (0.030)	0.035
Midwest	367	0.210	184	0.185 (0.036)	-0.025
Resident of the Northeast	367	0.188	184	0.217 (0.037)	0.029
Resident of the Southeast	367	0.253	184	0.245 (0.039)	-0.009
Resident of the Southwest	367	0.114	184	0.136 (0.030)	0.021
Resident of the West	367	0.234	184	0.217 (0.038)	-0.017
Resident of an Urban Area	367	0.289	184	0.283 (0.041)	-0.006
Resident of an Suburban Area	367	0.569	184	0.554 (0.045)	-0.015
High School Level of Education	367	0.131	184	0.147 (0.032)	0.016
Some College Level of Education	367	0.259	184	0.310 (0.041)	0.051
Bachelor's Degree Level of Education	367	0.354	184	0.299 (0.042)	-0.055
Household Income	365	77191.781	184	78967.391 (6530.679)	1775.610
Republican	366	0.150	184	0.147 (0.032)	-0.004
Democrat	366	0.519	184	0.440 (0.045)	-0.079*

Table 9: Balance Test: Male vs. Female

	Obs - Male NC	Male NC Mean	Obs Female NC	Female NC Mean	Difference
Male	184	1.000	175	0.000 (0.000)	-1.000
Age (in years)	184	40.500	183	39.054 (1.664)	-1.446
Hispanic, Latinx, or Spanish	184	0.114	184	0.114 (0.033)	-0.000
White	176	0.764	174	0.778 (0.045)	0.014
Black	176	0.092	174	0.102 (0.032)	0.010
Midwest	184	0.191	183	0.228 (0.043)	0.037
Resident of the Northeast	184	0.202	183	0.174 (0.041)	-0.028
Resident of the Southeast	184	0.251	183	0.255 (0.046)	0.004
Resident of the Southwest	184	0.109	183	0.120 (0.033)	0.010
Resident of the West	184	0.246	183	0.223 (0.044)	-0.023
Resident of an Urban Area	184	0.240	183	0.337 (0.047)	0.097**
Resident of an Suburban Area	184	0.590	183	0.549 (0.052)	-0.041
High School Level of Education	184	0.109	183	0.152 (0.035)	0.043
Some College Level of Education	184	0.240	183	0.277 (0.046)	0.037
Bachelor's Degree Level of Education	184	0.383	183	0.326 (0.050)	-0.056
Household Income	183	83296.703	182	71120.219 (7797.078)	-12176.485
Republican	184	0.159	182	0.141 (0.037)	-0.018
Democrat	184	0.467	182	0.571 (0.052)	0.104**

A.4 Additional Regressions

Table 10: Multivariate Regression Results: All Demographic Covariates

	<i>Dependent variable:</i> Average BLM Support Index
Treatment: Context Provided	-0.002 (0.115)
Treatment: Female Victim	0.014 (0.113)
Male	-0.304*** (0.094)
Age (years)	-0.015*** (0.003)
Democrat	1.098*** (0.268)
Other Political Affiliation	0.179 (0.271)
Republican	-0.555* (0.288)
Hispanic, Latinx, or Spanish	0.149 (0.170)
Non-Hispanic	
Black	0.148 (0.154)
Asian	-0.152 (0.167)
Other Race	-0.683** (0.274)
White	
Resident of Midwest	0.202 (0.169)
Resident of Northeast	0.286* (0.168)
Resident of West	0.351** (0.166)
Resident of Southeast	0.138 (0.162)
Resident of Southwest	
Resident of Urban Area	0.070 (0.108)
Resident of Rural Area	-0.037 (0.141)
Resident of Suburban Area	
Less than High School Education	-0.962* (0.526)
Less than Bachelor's Degree in Education	0.041 (0.097)
Bachelor's Degree or Higher in Education	
Constant	4.373*** (0.327)
Observations	509
R ²	0.357
Adjusted R ²	0.332

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 11: Specification 2: Binary Regression Results

	<i>Dependent variable:</i>					
	Share of Respondents who Support BLM					
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment: Context Provided (0,1)	0.001 (0.044)	-0.075 (0.064)	-0.107 (0.102)	0.066 (0.055)	0.022 (0.046)	-0.000 (0.044)
Male Respondent (0,1)		-0.179*** (0.063)				
Age (Years)			-0.074*** (0.021)			
Democrat (0,1)				0.390*** (0.057)		
Race Other than White, Black, and Asian (0,1)					-0.034 (0.131)	
Less than HS Education (0,1)						-0.764* (0.424)
Treatment: Female Victim (0,1)	0.023 (0.044)	-0.072 (0.062)	0.018 (0.100)	0.006 (0.058)	0.031 (0.046)	0.016 (0.044)
Context x Male		0.150* (0.090)				
Female Victim x Male		0.189** (0.089)				
Context x Age			0.035 (0.031)			
Female Victim x Age			0.004 (0.029)			
Context x Democrat				-0.095 (0.081)		
Female Victim x Democrat				-0.002 (0.081)		
Context x Other Race					-0.193 (0.168)	
Female Victim x Other Race					-0.092 (0.174)	
Context x Less HS Education						0.500 (0.520)
Female Victim x Less HS Education						0.984* (0.520)
Constant	0.760*** (0.031)	0.846*** (0.044)	0.984*** (0.070)	0.565*** (0.040)	0.762*** (0.032)	0.764*** (0.031)
Observations	551	535	551	550	551	551
R ²	0.001	0.016	0.048	0.182	0.012	0.009
Adjusted R ²	-0.003	0.007	0.039	0.174	0.002	-0.0002

Note:

*p<0.1; **p<0.05; ***p<0.01

A.5 Full Qualtrics Survey



Consent Page and Instructions

Consent

Key Information

The following is a short summary of this study to help you decide whether to be a part of this study. More detailed information is listed later in this form.

Why am I being invited to take part in a research study?

We invite you to take part in a research study because you are a United States resident aged 18 or older and I am interested in knowing your views on certain matters of our society.

What should I know about a research study?

There are no benefits to you from your taking part in this research. We cannot promise any benefits to others from your taking part in this research. However, possible benefits to others include a better understanding of the attitudes of Americans regarding specific topics.

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- Your participation is completely voluntary.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- Your refusal to participate will not result in any consequences of any loss of benefits that you are otherwise entitled to receive.
- You can ask all the questions you want before you decide.

Why is this research being done?

The purpose of this survey is for academic research at Harvard University. I am trying to contribute to knowledge

of the beliefs of Americans on specific topics, and this survey will give you an opportunity to express your own views.

How long will the research last and what will I need to do?

We expect that you will be in this research study for 10-15 minutes.

You will be asked to respond to an online survey which includes reading information and answering questions.

Is there any way being in this study could be bad for me?

We don't believe there are any risks from participating in this research.

Will being in this study help me in any way?

There are no benefits to you from your taking part in this research. We cannot promise any benefits to others from your taking part in this research. However, possible benefits to others include a better understanding of the attitudes of Americans regarding specific topics.

Detailed Information

The following is more detailed information about this study in addition to the information listed above.

What is the purpose of this research?

The purpose of this survey is for academic research at Harvard University. I am trying to contribute to knowledge of the beliefs of Americans on specific topics, and this survey will give you an opportunity to express your own views.

How long will I take part in this research?

We expect that you will be in this research study for 10-15 minutes.

What can I expect if I take part in this research?

You will be asked to respond to an online survey, which includes reading information and answering questions.

What happens if I say yes, but I change my mind later?

You can leave the research at any time; it will not be held against you. If you choose to withdraw from the survey before completion, your data will be deleted and not used for our research. You will not be asked to explain why you decided to withdraw.

If I take part in this research, how will my privacy be protected? What happens to the information you collect?

Efforts will be made to limit the use and disclosure of your Personal Information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Your information that is collected as part of this research will not be used or distributed for future research studies, even if all your identifiers are removed.

Can I be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include responding to the survey questions without adequate effort. This could lead to your responses flagged for low quality and not used.

What else do I need to know?

This research is being funded by the Economics Department at Harvard University.

Compensation - If you agree to take part in this research study, we will pay you an hourly wage of \$9.54 your time and effort. This wage will be pro-rated for the time spent on the survey and delivered via your Prolific account.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at courtneyrabb@college.harvard.edu.

- Yes, I would like to participate in this study and I certify that I am a US resident, aged 18 or older.
- No, I would not like to participate.

Instructions

In this survey you will be asked to first read a fictitious newspaper article about an event. Once you read the article, you will be asked to answer a series of questions.

Treatment: Male Victim NO Context

OKLAHOMA — Oklahoma Highway Patrol is investigating a fatal shooting in which a trooper shot and killed a Black man during a traffic stop this morning near Vinita:

The trooper pulled over a vehicle for a traffic violation at 8:56 a.m. On the eastbound side of the Will Rogers Turnpike at mile marker 285 in Craig County, according to an Oklahoma Highway Patrol news release,

“The trooper brought the female driver back to his patrol unit to speak with her. The trooper then went back to the vehicle and began speaking with the male passenger. It goes on to say, the trooper pulled out his firearm and shot the male passenger at some point during their interaction.”

Officials are investigating the events that led up to the shooting. Authorities state that the female driver was unarmed. No further details have been released at this time.

The male passenger was taken to a hospital where he died from his injuries, the news release states.

Authorities have not released the name of the trooper or the name of the man who was killed.

Based on the article that you have just read, in what state did the shooting occur?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

Ohio

- Oklahoma
- Oregon

Based on the article that you have just read, what was the gender of the victim who died as a result of the shooting?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

- Female
- Male

Treatment: Male Victim with Context

OKLAHOMA — Oklahoma Highway Patrol is investigating a fatal shooting in which a trooper shot and killed a Black man during a traffic stop this morning near Vinita: The 19th police killing in Oklahoma this year:

The trooper pulled over a vehicle for a traffic violation at 8:56 a.m. On the eastbound side of the Will Rogers Turnpike at mile marker 285 in Craig County, according to an Oklahoma Highway Patrol news release,

“The trooper brought the female driver back to his patrol unit to speak with her. The trooper then went back to the vehicle and began speaking with the male passenger. It goes on to say, the trooper pulled out his firearm and shot the male passenger at some point during their interaction.”

Officials are investigating the events that led up to the shooting. Authorities state that the female driver was unarmed. No further details have been released at this time.

The male passenger was taken to a hospital where he died from his injuries, the news release states.

Authorities have not released the name of the trooper or the name of the man who was killed.

This event falls after the string of police killings in the summer of 2020. According to the Mapping Police Violence Year-End Report, 1,126 people were killed by police in 2020 (“2020 Police Violence Report”). Though Black Americans comprise 13% of the population, they made up a disproportionate 27% of all police killings in that year. Most notably, the murders of George Floyd and Breonna Taylor have taken the national stage, as Americans throughout the country called for the end of police violence against Black individuals.

Based on the article that you have just read, in what state did the shooting occur?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

- Ohio
- Oklahoma
- Oregon

Based on the article that you have just read, what was the gender of the victim who died as a result of the shooting?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

- Female
- Male

Based on the article that you have just read, Black Americans comprise what percentage of Americans?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

- 13%
- 20%
- 27%

Treatment: Female Victim NO Context

OKLAHOMA — Oklahoma Highway Patrol is investigating a fatal shooting in which a trooper shot and killed a Black woman during a traffic stop this morning near Vinita:

The trooper pulled over a vehicle for a traffic violation at 8:56 a.m. On the eastbound side of the Will Rogers Turnpike at mile marker 285 in Craig County, according to an Oklahoma Highway Patrol news release,

“The trooper brought the male driver back to his patrol unit to speak with him. The trooper then went back to the vehicle and began speaking with the female passenger. It goes on to say, the trooper pulled out his firearm and shot the female passenger at some point during their interaction.”

Officials are investigating the events that led up to the shooting. Authorities state that the male driver was unarmed. No further details have been released at this time.

The female passenger was taken to a hospital where she died from her injuries, the news release states. Authorities have not released the name of the trooper or the name of the woman who was killed.

Based on the article that you have just read, in what state did the shooting occur?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

- Ohio
- Oklahoma
- Oregon

Based on the article that you have just read, what was the gender of the victim who died as a result of the shooting?

Please review the above article if you are unsure. You will have two opportunities to get this question right.

Female

Male

Media Source

What is your main source of news about current events in the US and around the world?

TV

Newspaper (Print)

Magazine

Radio

Internet

Word of mouth

Other

None; I don't follow the news or current events

Discrimination Beliefs

To what extent do you agree or disagree with the following statements:

Most Black people experience discrimination or have been hassled or made to feel inferior by the police because of their race:

Strongly
disagree

Disagree

Somewhat
disagree

Neither
agree nor
disagree

Somewhat
agree

Agree

Strongly
agree



Donation

Suppose you were given a hypothetical \$100 total to donate to some of the most popular nonprofit organizations which help people in the U.S. deal with the hurdles of everyday life.

You decide how many dollars out of the \$100 that you want to allocate to each of the following organizations. Your total donation must sum to \$100.

Feeding America	<input type="text" value="0"/>
American Red Cross	<input type="text" value="0"/>
Dana-Farber Cancer Institute	<input type="text" value="0"/>
Black Lives Matter	<input type="text" value="0"/>
Salvation Army	<input type="text" value="0"/>
St. Jude Children's Hospital	<input type="text" value="0"/>
Boys & Girls Clubs of America	<input type="text" value="0"/>
Habitat for Humanity	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

Social Justice Informed/Important

How informed do you think that you are about social justice issues?

Neither
informed

Extremely uninformed	Moderately uninformed	Slightly uninformed	Neither uninformed nor informed	Slightly informed	Moderately informed	Extremely informed
Extremely uninformed	Moderately uninformed	Slightly uninformed	Neither uninformed nor informed	Slightly informed	Moderately informed	Extremely informed
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In general, how important do you think it is to stay informed about social justice issues?

Extremely unimportant	Moderately unimportant	Slightly unimportant	Neither important nor unimportant	Slightly important	Moderately important	Extremely important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Police Reform

To what extent do you agree with or disagree with policy changes in policing and law enforcement, such as those recommended by the [Center for American Progress](#) and listed below:

- Increase police transparency and accountability (ex. conducting pattern-or-practice investigations in police misconduct)
- Overhaul harmful police policies and practices (ex. banning chokeholds, mandating body cameras)
- Prioritize community-based solutions to public safety (ex. training unarmed "crisis responders" to diffuse nonviolent incidents)

"Assessing the State of Police Reform." Center for American Progress, <https://www.americanprogress.org/article/assessing-state-police-reform/>. Accessed 17 Jan. 2022.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BLM Opinion

In terms of the Black Lives Matter Movement, to what extent do you agree or disagree with the mission of the organization, included below.

"#BlackLivesMatter was founded in 2013 in response to the acquittal of Trayvon Martin's murderer. Black Lives Matter Global Network Foundation, Inc. is a global organization in the US, UK, and Canada, whose mission is to eradicate white supremacy and build local power to intervene in violence inflicted on Black communities by the state and vigilantes."

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is the likelihood that you would participate in a Black Lives Matter protest?

Extremely unlikely	Moderately unlikely	Slightly unlikely	Neither likely nor unlikely	Slightly likely	Moderately likely	Extremely likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is the likelihood that your peers would participate in a Black Lives Matter protest?

Extremely unlikely	Moderately unlikely	Slightly unlikely	Neither likely nor unlikely	Slightly likely	Moderately likely	Extremely likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In terms of the Black Lives Matter Movement, to what extent do you agree with or disagree with the actions of protestors in 2020?

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographic Questions

The last part of this survey requests demographic information.

As a reminder, your name will never be recorded. Results may include summary data, but you will never be personally

identified.

What is your current gender identity?

- Male
- Female
- Genderqueer/gender non-conforming
- Different identity (please state)
- Prefer not to answer

What is your age?

- Under 21
- 21-34
- 35-44
- 45-54
- 55-64
- 65+

Are you Spanish, Hispanic, or Latino or none of these?

- Yes
- None of these

Are you Spanish, Hispanic, or Latino?

- Spanish

- Hispanic
- Latino

Choose one or more races that you consider yourself to be:

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander

Other

Which region of the United States do you live in?

- Midwest - IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI
- Northeast - CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT
- Southeast - AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV
- Southwest - AZ, NM, OK, TX
- West - AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY

Which of the following best describes the place where you now live: urban, suburban, or rural?

- Urban
- Suburban
- Rural

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associate degree in college (2-year)
- Bachelor's degree in college (4-year)
- Master's degree
- Doctoral degree
- Professional degree (JD, MD)

Information about income is very important to understand.

Would you please give your best guess?

Please indicate the answer that includes your entire household income in (previous year) before taxes.

- Less than \$30,000
- \$30,000 to \$59,999
- \$60,000 to \$99,999
- \$100,000 to \$199,999
- \$200,000 to \$499,999
- \$500,000 or more

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?

- Republican
- Independent
- Democrat

Other

No preference

Prolific ID

What is your Prolific ID? *Please note that this response should auto-fill with the correct ID.*