Women and Youth in Nonviolent Action Campaigns
Pre-Analysis Plan for Study 4 (United States)

Introduction

This document describes the design and implementation of an online conjoint survey experiment investigating the effects of women and youth participation on how people perceive protest events. It lightly modifies the design from earlier survey research on this subject described in a pre-analysis plan registered by Matthew Cebul (2022) and fielded in India (Study 1) and Nigeria (Study 2) in May-July 2022, and South Africa (Study 3) in September-October 2022.

To further investigate cross-national variation in gender effects identified in Studies 1-3, we add a fourth study to include sample populations from the United States (Study 4). This document describes the US research design. This study was determined to be exempt from IRB review (Harvard IRB23-1660).

Location

We expand our project to the United States for three reasons. First, we sought to broaden our scope beyond Nigeria, India, and South Africa as a way to test the cross-national durability and/or variation of earlier findings. Recovering similar findings across multiple countries would enhance our study's external validity, and divergent results could permit us to better understand some of the underlying mechanisms driving our results.

Second, the United States' past experience with racism and ongoing racial tensions makes it an especially important venue to investigate the enduring effects of racism on nonviolent protest perceptions. The intersection of gender and race is an important object of exploratory analysis in our pre-analysis plan, but there is variation in its relevance and salience in Studies 1-3. Study 1 manipulates caste (which has some effects), but not race. There is no identity marker for Nigeria. Study 3 manipulates race, but the country operates on a somewhat different racial paradigm than the US. Earlier research has argued that minority racial status depresses the perceived peacefulness of NVA campaigns[1], so incorporating these effects alongside gender is important, if only to help benchmark the magnitude of gender effects relative to other important factors.

[1] Manekin, Devorah and Tamar Mitts. 2022. "Effective for Whom? Ethnic Identity and Nonviolent Resistance." American Political Science Review, Vol. 116, No. 1: 161-180.

Finally, and relatedly, the United States has a storied history of repression, protest, and nonviolent action, and continues to maintain a high rate of public protests. This helps to improve the realism of our hypothetical protest scenarios for our respondents, for whom protest mobilization is a highly salient possibility as opposed to an abstract fiction largely removed from their lived experiences.

Sampling Strategy

We will field our experiments using Lucid, an online survey platform that specializes in recruiting high-quality contributors to participate in research studies. Earlier reflections on the virtues and drawbacks of online sampling, described in the pre-analysis plan for Studies 1 and 2, apply equally to this study.

Hypotheses

The hypotheses for this experiment largely mirror those in the prior conjoint experiments identified in Studies 1 and 2. For convenience, we reprint these initial hypotheses below:

1) *Peacefulness*

H1: Movements with predominantly female participants will be perceived as more peaceful than movements lacking prominent women's participation.

H1.b (Exploratory): Movements focused on gender equality will be perceived as more peaceful than those focused on other issues.

2) *Success*

H2.a: Movements with predominantly female participants will be perceived as more likely to succeed than movements lacking prominent women's participation. (This effect may be a function of women's movements perceived peacefulness.)

H2.b: Movements with age and gender diversity will be perceived as more likely to succeed than movements comprising specific gender or age subgroups.

3) *Appropriateness of Repression*

H3: Violent repression against movements with predominantly female participants will be perceived as less appropriate than repression against movements lacking overt female participation.

4) *Support*

H4a: Movements with predominantly female participants will receive greater self-reported support than movements lacking overt female participation.

H4b: Movements with age and gender diversity will receive greater self-reported support than movements comprising specific gender or age subgroups.

Initial survey waves in Nigeria, India, and South Africa provide considerable support for hypotheses (1), (2), and (4), and limited support for (3). Should our survey wave in the United States produce similar results, we will conclude with high confidence that these hypotheses are genuine causal effects.

In addition, we will build on Study 3 (South Africa) to investigate how the racial identity of protesters influences these outcome variables of interest, which will allow us to either further validate or contest recent findings.[2]

5) Race

H5a: Movements comprised of Black protesters will be seen as less peaceful, less successful, and/or less deserving of support.

H5b: Subgroup analysis: movements whose participants diverge from the respondents' own racial category will be perceived as less peaceful, less successful, and less deserving of support than movements of their own in-group.

Design

We again employ a ratings-based conjoint design, which asks respondents to report their beliefs about a series of 10 hypothetical, randomized protest events in their country. We field the experiment online to a sample of 2000 respondents.

Vignette Factors

Vignette factors are largely identical to the factors and levels used in the prior two experiments. We make two minor changes, described below:

1) Race: we employ a racial identity variable. This variable has three levels: protesters identify as White, Black, or mixed race. We randomize these levels uniformly to preserve statistical power (as was done in Study 1 with Caste, and in Study 3 with Race).

[2] Ibid.

2) Nonviolent Discipline: one of the clearest findings from earlier surveys is that the "nonviolent discipline" treatment is very potent – even the lowest levels of protester violence strongly influenced each outcome variable. To an important degree, this is simply how nonviolent protests are perceived (a feature, not a bug). Nevertheless, we suspect that nonviolent discipline may be crowding out effects from the other vignette elements in our artificially limited survey experimental setting—respondents may satisfice by skimming or ignoring other information once they read the NVDisc information.

To accommodate this concern, we include a final "no information" level for nonviolent discipline, replicating scenarios in which individuals do not have perfect information about protesters' behavior. In rounds where they receive no information about nonviolent discipline, respondents will need to consider other factors more closely. In turn, we adjusted the level probability distributions to include this new level, and also increase the total study N substantially to maintain statistical power.

Table 1: Factors and Levels Summary

Factor	Levels	Dist.
Gender	• Participants are men; "Men are calling for change!" • Participants are women; "Women are calling for change!" • Participants are both men and women; "People are calling for change!"	Uniform
Age	• Most protesters are young people below the age of 25 • Most protesters are older adults above the age of 25 • Protesters are both young people and older adults	Uniform
Identity	• Most protesters identified as Black • Most protesters identified as White • Protesters were racially diverse	Uniform
Goals	• Demand reforms to increase youth representation in politics • Demand reforms to improve gender equality • Demand reforms to protect religious rights • Demand reforms to strengthen democratic institutions	Uniform
Tactic	• A mass demonstration in the central square of Washington DC • A labor strike and mass walk out in Washington DC • A sit-in occupation of government buildings in Washington DC • A blockade of a major road in Washington DC	Uniform
Size	• Hundreds of people participated • Thousands of people participated • Tens of thousands of people participated • More than 100,000 people participated	• 50% • 30% • 15% • 5%
NV Disc.	• [No Information]	• 20%

	• No reports of property damage or violence caused by protesters. • At one point, a protester broke a window of a nearby building. • At one point, a protester hurled rocks at police. • Throughout the day, protesters looted and damaged nearby stores. • Protesters fought skirmishes with police throughout the day, hurling rocks at police and setting fire to a police vehicle.	• 40% • 14% • 14% • 6% • 6%
Repress	• Police took no action. • Police dispersed the demonstration. • Police dispersed the demonstration; some protesters were arrested, and several were injured. • Police dispersed the demonstration; a protester was killed, many were arrested, and others were injured.	• 50% • 20% • 20% • 10%

How much do you agree with the following statements?

The protesters are peaceful
The protesters are going to succeed
The government's response to this protest is appropriate
I would support a protest like this

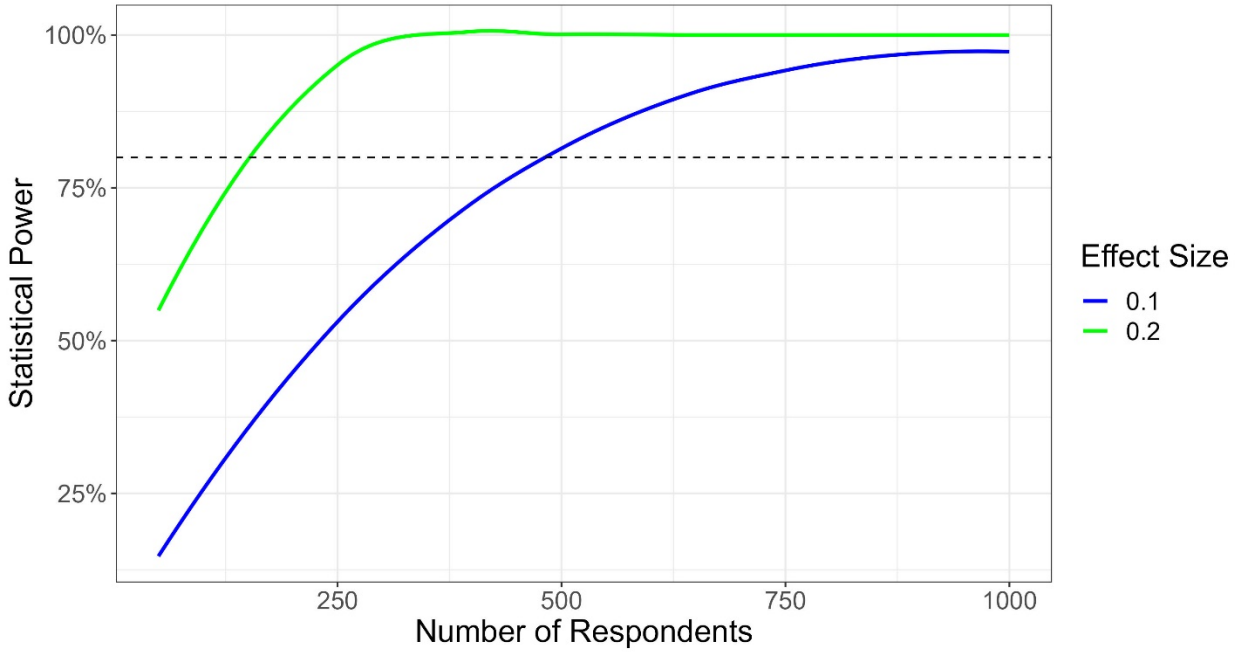
Sample Size / Power

For this survey, we have access to more resources and a larger respondent sample than was available for Studies 1 and 2. Study 3 also added another level in NV.disc, which reduces the power of the initial designs for Studies 1 and 2, and so increased the study N to 1600. Because we will directly replicate the conditions in Study 3 in the US context, we also adopt a study N of 2000.

This N easily ensures that our study is well powered – previous designs achieved 80% power with only 900 respondents, and we only added one additional factor level. Importantly, however, an N of 2000 will allow us to subset our data to only those profiles in which respondents received no information about nonviolent discipline (the "NoInfo" condition, roughly 25% of profiles), and still identify an effect of gender on our outcome variables. We ran a power analysis excluding the nonviolent discipline factor to verify the required sample size. We assumed a repression effect size of 0.2, justified by the significant results from our prior surveys, and a race effect size of 0.1, an educated guess based on prior studies of race and NVA.[3] The analysis was otherwise identical to the power analysis from our prior studies.

[3] Ibid.

Figure 1: Study 4 (United States) Power, NoInfo Only



Statistical power across sample and effect sizes, with α = 0.05.
Dashed line indicates 80% power.

Figure 1 illustrates that for an effect size of 0.1, we reach 80% power at around 500 respondents. For an effect size of 0.2, we achieve 80% power easily, with fewer than 200 respondents. As the gender effects identified in our previous experiments were between 0.1 and 0.2, we believe that an N of 500 in the NoInfo condition should be sufficient.

In addition, a total N of 2000 would also enable us to exclude the NoInfo level of NV.disc and analyze the results for the remaining 75% of the data. Such an analysis would closely replicate the design and analysis for Studies 1-3.

Analysis and Robustness Checks

Our analysis strategy will proceed as specified in our earlier pre-analysis plan – we make no major changes to our primary analysis methods or attendant robustness checks. That said, we plan several additional steps of exploratory analysis. First, we will conduct subgroup analysis on the NoInfo nonviolent discipline condition as described above, to see how the results change in the absence of information about protester behavior. In addition, we will subset the data by respondent race to see whether effects change based on ingroup-outgroup biases.