

Pre-Analysis Plan: Disability and Redistribution in the UK

Jac Larner^{*}

Joshua Thorp[†]

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Abstract

In multiple studies across time and in differing contexts, opposition to state welfare has been linked to beliefs on the demographic composition of welfare recipients. Particular, and almost exclusive, attention has been paid to the share of groups stereotyped as 'undeserving', namely people from minority ethnic backgrounds and immigrants. In this paper, we test whether eliciting associations between welfare and disabled people - a group frequently stereotyped as highly deserving - increases support for welfare. Using a nationally representative survey experiment conducted in the United States, we employ random assignment to different treatments aimed at providing distinct signals regarding the proportion of welfare recipients who are disabled. Our analysis encompasses both attitudinal shifts and behavioral responses elicited by these treatments.

^{*}Cardiff University; larnernjm@cardiff.ac.uk

[†]University of Michigan, Ann Arbor; jrthorp@umich.edu

1 Motivation

This study explores how providing citizens with information cues about the prevalence of disability shapes attitudes toward distribution. In the first experiment presented in this paper, we examine whether beliefs about the share of welfare recipients who are disabled¹ shape support for redistributive policies. We thus provide the first causal test of the link between beliefs about disability and support for welfare.

The study builds upon existing research that suggests that support for welfare in the many developed democracies is frequently influenced by incorrect assumptions about the size and needs of different minority groups (Nadeau, Niemi, and Levine, Nadeau et al.; Sigelman and Niemi, Sigelman and Niemi; Ford, 2006; Gilens, Gilens; Hampton, Hampton; Landy, Guay, and Marghetis, Landy et al.; Avdagic and Savage, Avdagic and Savage). When these assumptions are corrected by providing people with the true information, people’s attitudes towards various groups and policies can shift dramatically (Silverman, Kent, and Gelpi, Silverman et al.; Kalla and Porter, Kalla and Porter; Guay, Guay). For the most part, existing studies focus on the degree to which support for welfare programs is attenuated by exposure to information cues about stereotypically low-deserving and low status social groups, most notably immigrants and members of racial and ethnic minorities (Ford, 2006; Gilens, Gilens; Kootstra, Kootstra; Akesson et al., 2022). However, no studies have examined whether support for welfare might shift when respondents are provided with information cues about claimant groups typically stereotyped as high-deserving, such as people with disabilities.

Disabled citizens are widely thought to epitomize the “deserving poor” (Hampton, Hampton; Van Oorschot, b,a). Numerous observational studies find that in advanced democracies, no social group besides the elderly is considered more deserving of assistance from the government than people with disabilities (Larsen, Larsen; Van Oorschot, b,a; Van Oorschot and Roosma, Van Oorschot and Roosma). This finding replicates across states with diverse welfare regimes, differential levels of welfare spending, and cultural attitudes toward welfare recipients (Alesina, Glaeser, and Glaeser, Alesina et al.; Esping-Andersen, Esping-Andersen; Larsen, Larsen).

In this study, we test whether eliciting associations between welfare and disabled people increases support for welfare. We use a survey experiment on a nationally representative sample of 2,000 US adults, and expose respondents to varying levels of information relating to the prevalence of disabled welfare recipients. This research design allows us to estimate the causal effect of different factual information cues on support for redistribution. In the following sections we outline our research design and analysis plan.

¹Terminology around disability is continually evolving and varies with cultural context and individual preference (??). In the United States, a preference for “person-first” language - i.e. “person with a disability” - reflects a desire to avoid defining people by their disabling health conditions or impairments. This terminology is commonly expressed in the acronym “people with disabilities”. In the UK “disabled person” is more common, reflecting a commitment to the social model of disability (??). We affirm the plurality of opinion within the disability community, and use both terms interchangeably throughout this paper.

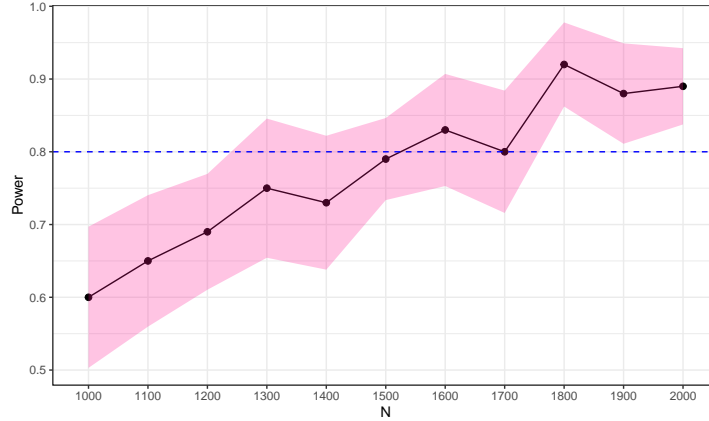


Figure 1: Multi-arm power analysis using Declare Design

2 Design

To test these ideas, we employ a multi-arm survey experiment. A representative sample of US adults (18+) will be recruited via Prolific Academic and paid \$1.64 for taking part.² Research by [Peer et al. \(2017\)](#) and [Gupta et al. \(2021\)](#) has shown that Prolific offers several benefits over similar 'convenience' platforms, such as less dishonesty, fewer failed attention checks, and produce better quality data. Ethical approval was received by Cardiff University's School of Law and Politics Research Ethics Committee on 20 March 2024 (reference SREC/200324/002). This study was granted an exemption by the University of Michigan Institutional Review Board (Study ID: HUM00249867).

2.1. Subjects

Respondents will be recruited via Prolific Academic. A representative sample will be achieved using distributions of age, sex and ethnicity in the US population. A power analysis was carried out using the DeclareDesign framework ([Blair et al., 2023](#)). Calculations were carried out using a mutli-arm designer using a significance level of $\alpha=0.05$, with $m=4$. Figure 1 shows the required sample size to achieve a given statistical power. We are well powered to detect a small effect (less than $d=0.2$) at 80% power).

2.2. Experimental Design

We use a between subjects survey experiment, building on similar designs that test whether eliciting beliefs about stereotypically *undeserving* groups influence support for welfare.³ All respondents begin the survey by reading a landing page informing them of the puprose of the study, as well as telling

²Fee calculated according to the UK's minimum hourly wage for adults aged 21+, for a 6 minute survey.

³In particular our design is very similar to the second experiment in [Akesson et al. \(2022\)](#) study of racial attitudes and support for redistribution.

them that those who complete the survey will be entered into a lottery to win an additional \$100. Respondents then proceed by answering a series of questions on demographics, including whether they are themselves disabled or if they have a disabled close family member, and political ideology and party identification. Respondents are then shown a definition of welfare in the US⁴ and asked if they or anyone in their household are currently or had previously been recipients of welfare. Prior to progressing to treatments and outcomes we include an attention check asking respondents whether they had devoted their full attention to the survey so far.

2.3. *Treatments*

We use a complete random assignment strategy to divide the sample into four conditions; one control and three treatment groups. The **control group** progress straight from the attention check to the outcome questions. In **Treatment group 1** we prime respondents to make the link between between disability and welfare by asking them to estimate what share of welfare recipients in the US are disabled. To incentivise accurate answers, we tell respondents that answers within 2 percentage points of the truth would be rewarded with entry into a lottery for \$100.

Treatment 2 follows the same procedure, but after respondents provide their estimate they are shown an informational vignette which tells respondents that “*Estimates from 2013 suggest that, **out of every 100 American adults receiving welfare, 33 have a disability**. In other words, about a **third of all Americans receiving welfare** from the government **have some kind of disability**. These estimates were obtained using the data from the United States Census.*” On the next page we include a manipulation check where respondents are required to repeat the information seen in the vignette, and are unable to proceed until they do. **Treatment 3** followed an identical procedure, but instead respondents were told that “*Estimates from 2013 suggest that, **out of every 100 American adults receiving welfare, 58 have a disability**.*”

The differing signals are derived from figures that include only cash payments and cash payments + benefits in-kind. It is important to note that while this allows us to employing deception, all information used in the survey, including the report from where the figures were taken⁵, are included in a debrief document provided to respondents.

2.4. *Main outcome measures*

Welfare attitudes. We ask a series of questions designed to measure levels of support for welfare. First, we ask respondents the extent that they agree/disagree with three statements; “People who receive welfare are poor through no fault of their own”, “Welfare programs help lift Americans out of poverty”, “Most people on welfare are deserving of the help they get”. Responses are measured on a 5-point scale. We then ask respondents whether they would like more or less public expenditure

⁴Here we used identical wording to Akesson et al. (2022).

⁵See <https://www2.census.gov/library/publications/2013/acs/acsbr11-12.pdf>

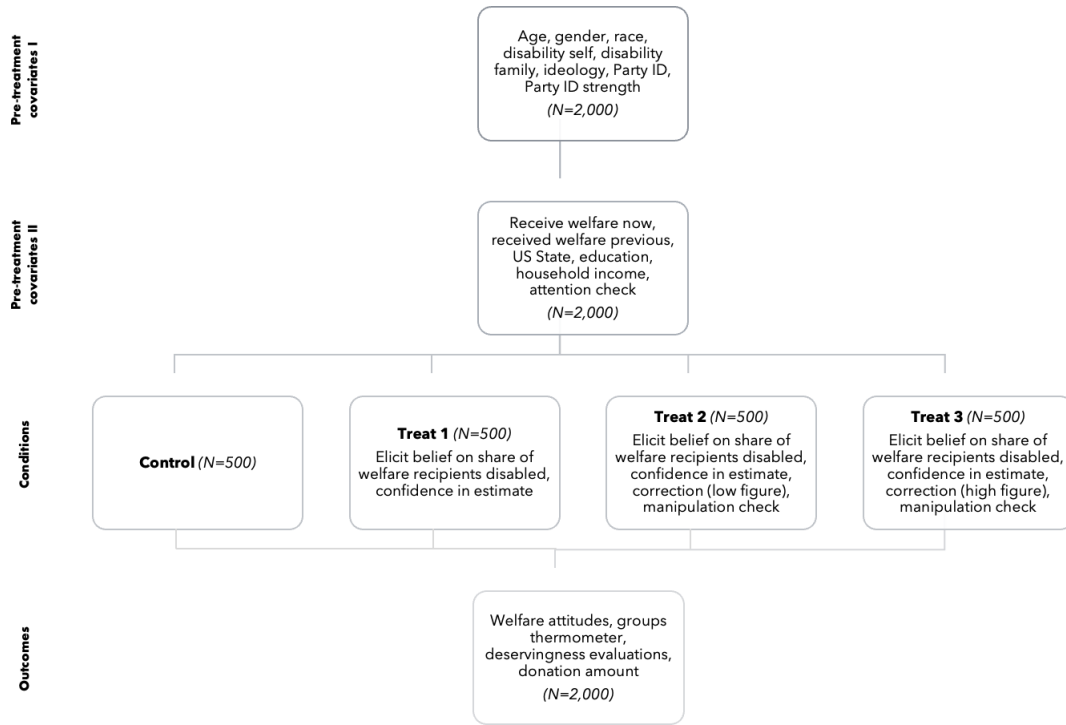


Figure 2: Survey design

on welfare, followed by a question on whether they would like more or less public expenditure on welfare for people with disabilities. These are again both measured on a 5-point scale.

Optional donation. We next offer people the opportunity to donate their lottery winnings (if they win) to an organisation by showing them the following text: “As previously stated, upon completion you will now be entered into a lottery for \$100. Winners will be notified within 2 weeks of the survey completion. Previously several respondents have requested the ability to donate some of their winnings to a charitable cause. The organisation selected for this current survey cycle is the Center on Budget and Policy Priorities. This is an organisation that ensures policy makers take into account the needs of low income people and those on welfare. How much of the \$100 would you like to donate to the above organisation? Responses are measured on a 0-100 scale.

2.5. Additional outcome measures

Deservingness evaluations. We next ask respondents to evaluate how deserving of financial assistance six groups of citizens are; people with disabilities, the elderly, veterans, homeless people, African-Americans and immigrants. Responses are measured on a 5-point scale.

Thermometer ratings. Finally, respondents are asked to provide thermometer ratings for 11 groups; poor people, the federal government, people on welfare, middle class people, working class people, rich people, conservatives, liberals, labor unions, the military, and people with disabilities.

2.6. *Pre-treatment covariates*

We will measure a number of demographic and political-attitudinal covariates pre-treatment. We will use these items to construct survey weights and conduct exploratory analyses. These items include: ANES partisanship (7-point), ideological self-placement (7-point), demographics, disability status, receipt of welfare, receipt of social security disability insurance (SSDI).

2.7. *Hypotheses*

2.7.1. *Main Effects*

- **H1:** Respondents in T1 will report stronger support for increasing welfare payments, and donate more money to the pro-welfare organization, relative to respondents in the control group.
- **H2:** Respondents in T2 will report stronger support for increasing welfare payments, and donate more money to the pro-welfare organization, relative to respondents in T1, and relative to the control group.
- **H3:** Respondents in T3 will report stronger support for increasing welfare payments, and donate more money to the pro-welfare organization, relative to respondents in T1 and T2, and relative to the control group.

2.7.2. *Exploratory analysis*

In addition to our main analysis, we will also explore heterogeneous treatment effects across several variables including political partisanship, ideological self-placement, and disability status. We will also examine how our treatment effects vary among respondents based on their prior beliefs about the share of welfare recipients with disabilities. Finally, we will replicate our main analyses using an index of the four welfare attitudes outcomes detailed above.

3 Analysis

3.1. *Descriptive Analysis*

We will begin by plotting the distribution of pre-treatment beliefs about the share of welfare recipients with disabilities, with an example plot shown below in Figure 2.

3.2. *Main Analysis*

We estimate the main effects of our manipulations by regressing each of our outcome variables on a categorical variable for the treatment:

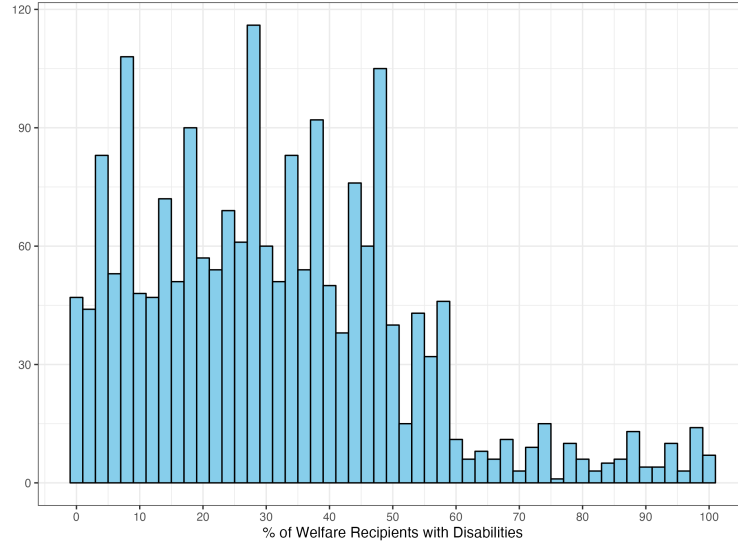


Figure 3: Pre-treatment beliefs (simulated)

$$Y_i = \alpha + \beta_1 \text{Treat}_i + \epsilon \quad (1)$$

We plan to present results of our main analysis using figures like Figure 3. These figures show the data and the averages for each treatment condition with 95% confidence intervals.

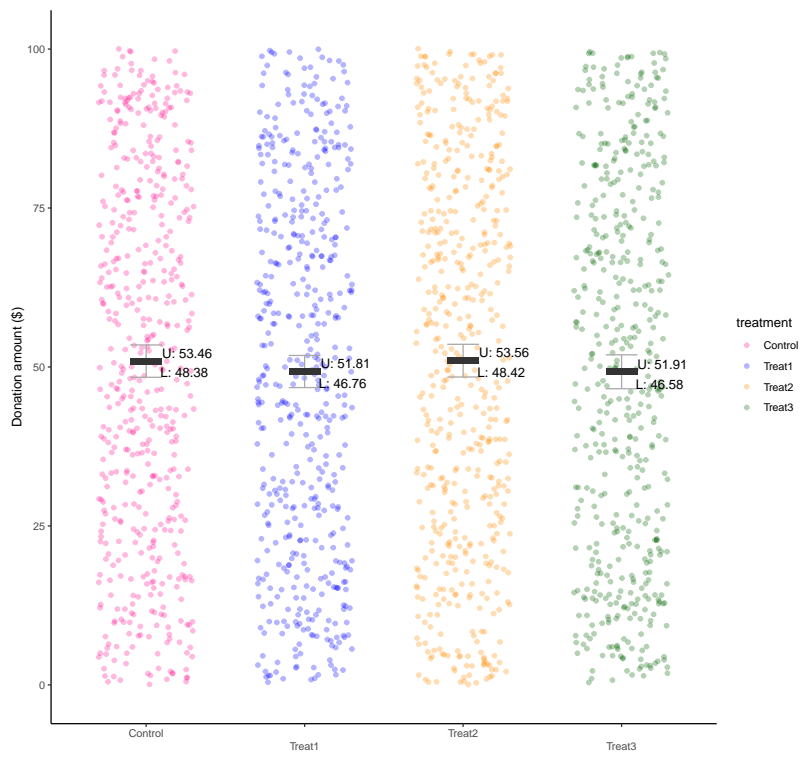


Figure 4: Effect of treatment on donation amount in \$ (simulated data)

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Appendices