Priming Past Experiences and Preferences for Redistribution

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Abstract

This paper analyzes the effects of priming people to think about negative past experiences such as job loss or illness, on attitudes towards redistribution. Using a randomly assigned survey design, we find that the effects of being primed to think about past misfortunes on support for redistribution vary by gender. Being cued to think about negative past experiences increases sympathy for governmental redistribution for male respondents, but not for non-males. For non-male respondents, past misfortunes increase support for redistribution even when not primed. Psychological research suggests that this could be due to gender-based differences in how events are remembered.

1 Introduction

Significant research has been dedicated to understanding determinants of attitudes toward redistribution. Much of the literature focuses on how economic standing impacts preferences for redistribution. In Durante et al. (2014), experimental subjects favor redistribution rules that maximize their own post-tax earnings, though social preferences also matter, as many are willing to pay to reduce inequality among others. Conventional models predict that poorer individuals are more likely to favor redistribution because they stand to gain the most from such policies (Alesina and Giuliano, 2011; Piketty, 1995), but empirical evidence does not generally support this. Hoy and Mager (2021) find that in seven out of ten countries surveyed, informing people that they are poorer than they initially thought significantly *decreases* their concern about wealth inequality. And in laboratory experiments, Kuziemko et al. (2014) find that an aversion to being in "last-place" leads many low-income individuals to oppose redistribution in fear that such policies could benefit people just below them in the economic ladder. Another important predictor of tax and redistribution preferences is one's belief about opportunities for, and determinants of success. People who believe that societies offer equal opportunities to all are less supportive of redistribution (Benabou and Tirole, 2006). In a similar vein, those who believe economic outcomes are largely determined by circumstances outside of one's control are more sympathetic to redistribution than those who believe that success is a function of one's own efforts (Fong, 2001). There is also experimental evidence that the way monetary rewards are determined impacts subjects' willingness to make transfer payments from high earners to low earners. For example, Krawczyk (2010) demonstrates that average transfers are lower when outcomes are determined by performance on a task rather than by pure luck, and Tepe et al. (2020) obtain similar results, where desired tax rates are lower under merit rules than under luck rules.

Past experiences also can affect willingness to redistribute resources to those in need.

Giuliano and Spilimbergo (2014) find evidence that growing up in a recession increases support for redistribution and makes people more likely to vote for progressive political parties. Cassar and Klein (2019) use a laboratory setting to show that experiencing failure increases willingness to redistribute money to others. And experiencing income inequality can also affect future views towards inequality and redistribution. Interestingly, those who have experienced higher inequality in their lives are *less* likely to favor redistribution and to vote for left-wing parties (Roth and Wohlfart, 2018). One possible explanation for this is that inequality becomes normalized when people have more experience with it.

This paper extends the literature by studying the impact of priming people to think about negative past experiences on preferences for redistribution. We conduct an experiment where survey respondents are asked questions about various past misfortunes as well as their attitudes toward redistribution, but the ordering of questions is randomly assigned. We find that priming effects vary by gender: males who are primed to think about negative past experiences have a greater preference for governmental redistribution than those in the control group, but this effect is insignificant for non-male respondents. For non-males, past misfortunes increase support for redistribution regardless of whether or not they are primed to think about them. We refer to research in psychology to help explain these results.

2   Data and Empirical Methodology

Survey participants were recruited using a nationally representative sample of 474 subjects provided by *Prolific* for the United States.[1] [2] All subjects were presented with the same set of questions, but the order was varied between treatment and control groups. Individuals in

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[1] *Prolific* is an online recruitment tool recruited from the general population for surveys and experiments. Research has shown that compared to subjects in a lab experiment and MTurk, Prolific has an advantage of both low noise in data and low cost per observation (Palan and Schitter, 2018; Gupta et al., 2021).

[2] The full survey is provided in the appendix.

the treatment group were asked about negative events experienced in the last 10 years (e.g., unemployment, divorce, death of a loved one, illness) before being asked about their attitudes towards redistribution, while the ordering was reversed for those in the control group. Specifically, our survey asks individuals to respond to the statements ""The government should reduce income differences" versus "The government should not concern itself with reducing income differences".[3] All subjects were paid a flat amount of $2.50 for completing a survey that took, on average, less than 3 minutes.

In Table 1, we present summary statistics for the control and treatment groups, as well as the differences between the two. We find no statistically significant differences between the treatment and control groups in terms of demographics or events experienced.

The primary effect we are interested in is how making a subject think of their past experiences impacts their attitudes toward redistribution. By randomly assigning the order of questions, we are able to identify this effect by comparing those that are asked about the events before the redistribution question with those that are asked the same questions in reverse order.

Figure 1 shows a histogram of attitudes towards redistribution broken down by treatment and gender. Comparing the control groups by gender, it is evident that males are less in favor of redistribution than non-males.[4] This gender gap diminishes for the treatment group, something that seems to be driven by males becoming more sympathetic towards redistribution as a result of priming.

To identify the size of the treatment effect, we estimate the following specification using

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[3]This question has been used in other research and is similar to a question in the World Values Survey, that asks about the importance that governments tax the rich and subsidize the poor (Alesina and Giuliano, 2011; Hoy and Mager, 2021).

[4]Our survey respondents includes two individuals who identify as non-binary, in addition to 234 males and 236 females.

Ordinary Least Squares:[5]

$$Y_i = \alpha + \beta T_i + \theta_i + \epsilon_i \tag{1}$$

Our first outcome of interest is Y_i, which is measured on a scale from 1-5 with 5 representing strong agreement with the statement "The government should reduce income differences" and 1 representing strong agreement with the statement "The government should not concern itself with reducing income differences." We also estimate a probit model, where the dependent variable is equal to 1 if the individual strongly agrees with "The government should reduce income differences" and 0 otherwise. Our coefficient of interest, β, represents the effect of treatment on attitudes toward redistribution. We also control for other factors that could impact attitudes towards redistribution including age-group, self-identified race, income group, and education group (θ_i) and cluster our standard errors at the state-level.

We also explore the interaction between events that a subject has experienced and the treatment effect by estimating a slightly different specification:

$$Y_i = \alpha + \beta_0 E_i + \beta_1 T_i + \beta_2 T_i \cdot E_i + \theta_i + \epsilon_i \tag{2}$$

This specification allows us to estimate the effect of the number of events one has experienced on their preference for redistribution, reflected in β_0, the treatment effect (absent any events), given by β_1, and an interaction between the two, represented by β_2. If treatment magnifies a subjects' memory of prior events, we would expect β_2 to be positive.

3 Results

Table 2 shows results from estimating equation (1) for the full sample and separately by gender. In the first column, we obtain a statistically insignificant treatment effect of 0.088 for

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[5]Results are similar for ordered probit regressions

the full sample, but the next two columns highlight the gender differences that were evident in Figure 1. The effect for males is statistically significant with an estimated increase of approximately 0.3 on a five-point scale, while for non-males we find a negative and insignificant effect. [6]. We find a similar pattern when the outcome is instead an indicator representing strong agreement with government redistribution. Treatment increases the probability that males strongly agree with reducing income differences by 0.11 percentage points, relative to a baseline mean of 0.21, while for non-males we estimate no effect of treatment.

To better understand the mechanism behind this result, we interact the treatment with the total number of events that subjects have experienced. Table 3 shows the results from estimating equation (2) separately for the full sample, males, and non-males. For the full sample in column one, we estimate null effects for both the treatment effect and the treatment interacted with events. We do find a statistically significant positive relationship between the number of events one has experienced and sympathy towards redistribution. This makes sense intuitively, as people who have experienced misfortune will be able to relate to others who have had experiences that negatively impacted their financial well-being. A similar pattern is reflected in the non-males sub-sample in column three, but a very different pattern emerges for males in the second column. For males, we find that events, absent treatment, do not have a statistically significant effect on attitudes towards redistribution. When primed, however, male attitudes towards redistribution are significantly more responsive to the number of events: there is a positive, statistically significant treatment effect for those with at least three or more events in the past 10 years, which represents almost 40 percent of all males. But priming has an insignificant effect for non-males even if the subject has had eight negative events, the maximum number in our sample.[7] The last three columns of Ta-

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[6]We also find a statistically significant difference in the treatment effect for males and non-males if we estimate the same specification, but allow for heterogeneous treatment effects by gender

[7]We also tested to see whether the effects of priming varied according to the type of event experienced in the past. The results paint a fairly consistent picture: males that are primed to think about past events

ble 3 show a similar pattern when the dependent variable is an indicator equal to 1 if the individual strongly agrees that the government should reduce income differences. We find a positive, statistically significant effect of treatment for males with at least 3 events and an insignificant effect for non-males, even if the subject has experienced eight negative events.

4   Discussion

In this paper, we have analyzed the impact of priming people to think about prior negative experiences on attitudes toward redistribution. For male survey respondents, priming them about past experiences increases their support for governmental distribution, but there are no such effects for non-males. Instead, for non-males, experiencing misfortune increases sympathy for redistribution regardless of whether they are reminded of these events or not. Psychological research on gender differences in memory and recall support these results. Pillemer et al. (2003) and Herlitz et al. (1997) demonstrate that women's memory styles are markedly more specific and episodic than men's styles, and Grysman and Hudson (2013) find that women report more vivid memory experiences and include more details about emotions than men. Buckner and Fivush (1998) documents gender differences even among young children, as girl's autobiographical narratives were longer and more detailed than were boys' narratives. And researchers have also found that women generally have more negative and longer lasting reactions to traumatic experiences than men (Holbrook et al., 2002; Solomon et al., 2005). By using a randomly assigned survey design, we are able to identify the effect of differences in how experiences are internalized on attitudes towards redistribution. In line with the psychology literature, our results suggest that for women, simply having negative past experiences is enough to impact preferences for redistribution, and no reminders are

increase their preferences for redistribution relative to the control group across all different types of events, while these marginal effects are uniformly small and insignificant for non-males, regardless of the type of event experienced.

necessary. Traumatic events and misfortunes remain salient for them, even long past the times in which they experience them. But for men, the impacts of these events quickly fade over time, which may explain why priming them to think about them is necessary to change their attitudes toward redistribution.

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Table 1: Summary Statistics by Treatment

	(1)	(2)	(3)
	Control	Treatment	Difference
Gender (0 = male)	0.49	0.52	-0.03
	(0.50)	(0.50)	(0.05)
Caucasian	0.78	0.74	0.04
	(0.41)	(0.44)	(0.04)
Black	0.12	0.17	-0.05
	(0.32)	(0.38)	(0.03)
Married	0.49	0.52	-0.03
	(0.50)	(0.50)	(0.05)
Age Scale (1 to 7)	3.51	3.49	0.01
	(1.65)	(1.65)	(0.15)
Income Scale (1 to 12)	6.95	6.80	0.15
	(3.58)	(3.57)	(0.33)
Education Scale (1 to 10)	6.82	7.05	-0.23
	(1.85)	(1.70)	(0.16)
Events (max 10)	2.37	2.14	0.23
	(1.64)	(1.61)	(0.15)
Any Employment Event	0.63	0.59	0.04
	(0.48)	(0.49)	(0.04)
Physical/Mental Health Event	0.40	0.39	0.00
	(0.49)	(0.49)	(0.04)
Death or Divorce	0.55	0.49	0.05
	(0.50)	(0.50)	(0.05)
Other Events (e.g., sued)	0.26	0.22	0.05
	(0.44)	(0.41)	(0.04)
Pref. for Redistribution (1 to 5)	3.51	3.60	-0.09
	(1.29)	(1.26)	(0.12)
Observations	237	237	474

Notes: This table compares the control and treatment groups for a variety of observables.

Figure 1: Priming and Redistribution
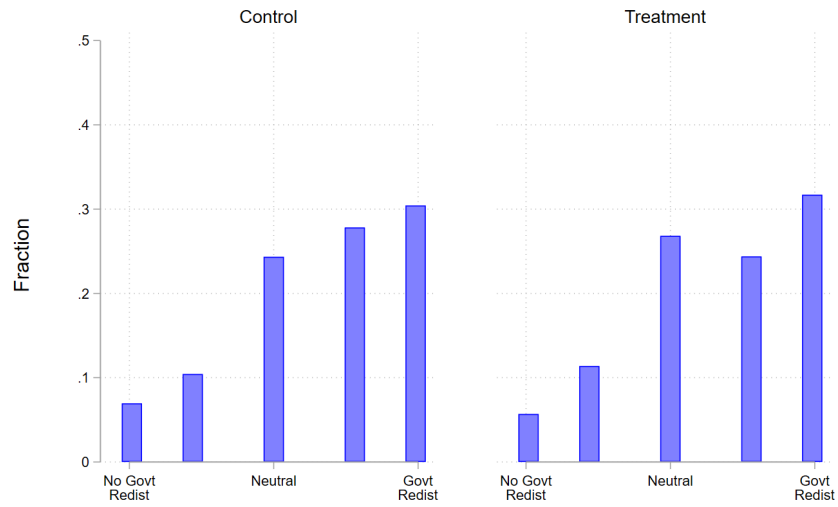
(a) Males

(b) Non-Males

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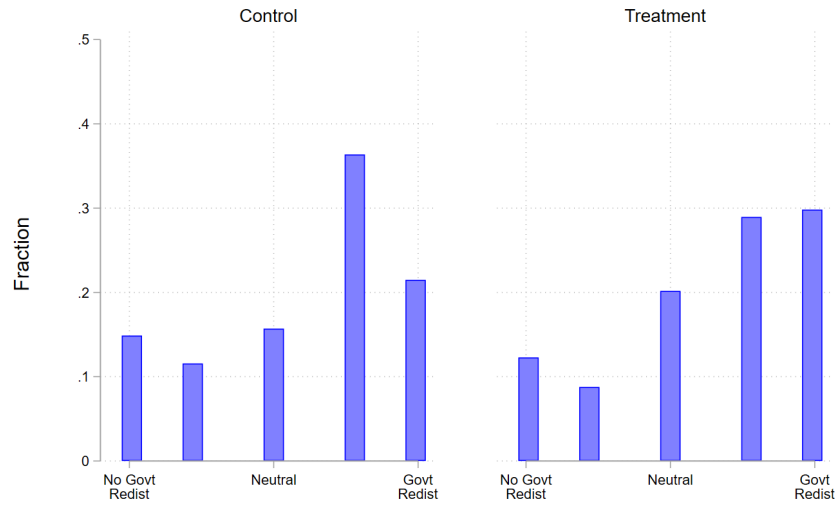
Table 2: Priming Past Events and Attitudes Towards Redistribution

	(1)	(2)	(3)	(4)	(5)	(6)
	Redist.(1-5)	Redist.(1-5)	Redist.(1-5)	$\mathbb{1}$(Redist=5)	$\mathbb{1}$(Redist=5)	$\mathbb{1}$(Redist=5)
Treatment	0.088	0.298**	-0.085	0.053*	0.114**	-0.015
	[0.096]	[0.116]	[0.153]	[0.031]	[0.044]	[0.056]
Sample	Full	Male Only	Non-Male Only	Full	Male Only	Non-Male Only
Outcome Mean	3.51	3.38	3.64	.26	.21	.3
Observations	470	232	236	470	232	236
Clusters	44	42	42	44	42	42

Notes: Dependent variable in the first three columns is a 1-5 scale, where 5 represents strong agreement with the statement "The government should reduce income differences" and 1 represents strong agreement with "The government should not concern itself with reducing income differences". The dependent variable in the last three columns is an indicator equal to 1 if the individual selected 5. All specifications include age, race, education, and income fixed effects. Standard errors are clustered at the state level.

Table 3: Number of Events, Priming Past Events, and Attitudes Toward Redistribution

	(1)	(2)	(3)	(4)	(5)	(6)
	Redist.(1-5)	Redist.(1-5)	Redist.(1-5)	$\mathbb{1}$(Redist=5)	$\mathbb{1}$(Redist=5)	$\mathbb{1}$(Redist=5)
Treatment	0.161	-0.096	0.321	0.060	-0.046	0.156
	[0.210]	[0.350]	[0.412]	[0.095]	[0.103]	[0.186]
Treatment*Events	-0.013	0.123	-0.106	0.001	0.050*	-0.047
	[0.057]	[0.096]	[0.098]	[0.027]	[0.028]	[0.051]
Events (#)	0.126***	0.069	0.155**	0.036**	0.026	0.049
	[0.043]	[0.061]	[0.061]	[0.016]	[0.022]	[0.032]
Sample	Full	Male Only	Non-Male Only	Full	Male Only	Non-Male Only
Outcome Mean	3.51	3.38	3.64	.26	.21	.3
Observations	470	232	236	470	232	236
Clusters	44	42	42	44	42	42

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Appendices

Survey
Group 1 (treatment): Primed to think about negative past events

1.   Age: What is your current age?

2.   Gender: How do you identify?
   -   Male, Female, Non-binary, Self-describe (open ended), Prefer not to answer

3.   Race/Ethnicity: How do you identify? (Check all that apply)
   -   Asian or Pacific Islander, Black or African American, Hispanic or Latino, Native
       American or Alaskan Native, White or Caucasian, Prefer not to answer

4.   State: What is your current state of residence?

5.   Events: Thinking back over the last 10 years, have you had any of the following events occur? Check any and all that apply.
   -       Divorce/separation
   -       Lost a job
   -       Been unemployed for longer than 3 months
   -       Death of partner/spouse/child/parent/close relative or close friend
   -       New onset of major physical illness
   -       New onset of mental health difficulties
   -       Major auto accident
   -       Natural disaster, fire, major flooding impacting your home
   -       Crime against you or immediate family member
   -       Being sued

6.   Which of the events that you checked above was, broadly speaking, the most challenging for you?

7.   Getting ahead: Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?

   -   (1-5 scale, where 1 represents hard work being most important, 3 represents hard work
       and luck being equally important, and 5 represents luck being most important)

8.   Redistribution: Respond to the following statements: "The government should reduce income differences" versus "The government should not concern itself with reducing income differences"

   -   (1-5 scale, where 1 represents strong agreement with "The government should reduce
       income differences", 3 represents a neutral perspective towards these statements, and 5
       represents strong agreement with "The government should not concern itself with
       reducing income differences")

9.   Employment: What is your current employment status?

- Employed for wages, self-employed, not employed but looking for work, a homemaker, a student, retired, unable to work

10. Grade: What is the highest grade or year of school you have completed?
   - Never attended school or only kindergarten, Grades 1 through 8 (Elementary), Grades 9 through 11 (Some high school), Grade 12 or GED (High school graduate), College 1 year to 3 years (Some college or technical school), College 4 years or more (College graduate)

11. Marital: What is your marital status?
   - Married or Domestic Partner, Divorced, Separated, Widowed, Single and Never Married/Partnered

12. Political: Generally speaking, how do you characterize your political viewpoints?

   - (1-7 scale representing very liberal, liberal, somewhat liberal, moderate, somewhat conservative, conservative, very conservative)

13. Do you consider yourself a spiritual person?

   - (1-4 scale representing not spiritual, somewhat spiritual, moderately spiritual, very spiritual)

14. Do you consider yourself a religious person?

   - (1-4 scale representing not religious, somewhat religious, moderately religious, very religious)

15. What is your household's approximate yearly income?

   - (<10K, 10K-15K, 15K-20K, 20K-25K, 25K-35K, 35-50K, 50K-75K, >75K)

Group 2 (control): Not primed to think about negative past events

1.   Age: What is your current age?

2.   Gender: How do you identify?
   - Male, Female, Non-binary, Self-describe (open ended), Prefer not to answer

3.   Race/Ethnicity: How do you identify? (Check all that apply)
   - Asian or Pacific Islander, Black or African American, Hispanic or Latino, Native American or Alaskan Native, White or Caucasian, Prefer not to answer

4.   State: What is your current state of residence?

5.   Getting ahead: Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?

   - (1-5 scale, where 1 represents hard work being most important, 3 represents hard work and luck being equally important, and 5 represents luck being most important)

6.   Redistribution: Respond to the following statements: "The government should reduce income differences" versus "The government should not concern itself with reducing income differences"

   - (1-5 scale, where 1 represents strong agreement with "The government should reduce income differences", 3 represents neutral perspective towards these statements, and 5 represents strong agreement with "The government should not concern itself with reducing income differences")

7.   Events: Thinking back over the last X years, have you had any of the following events occur? Check any and all that apply.
   - Divorce/separation
   - Lost a job
   - Been unemployed for longer than 3 months
   - Death of partner/spouse/child/parent/close relative or close friend
   - New onset of major physical illness
   - New onset of mental health difficulties
   - Major auto accident
   - Natural disaster, fire, major flooding impacting your home
   - Crime against you or immediate family member
   - Being sued

8.   Which of the events that you checked above was, broadly speaking, the most challenging for you?

9.   Employment: What is your current employment status?
   - Employed for wages, self-employed, not employed but looking for work, a homemaker, a student, retired, unable to work

10.   Grade: What is the highest grade or year of school you have completed?
   -    Never attended school or only kindergarten, Grades 1 through 8 (Elementary), Grades 9 through 11 (Some high school), Grade 12 or GED (High school graduate), College 1 year to 3 years (Some college or technical school), College 4 years or more (College graduate)

11.   Marital: What is your marital status?
   -    Married or Domestic Partner, Divorced, Separated, Widowed, Single and Never Married/Partnered

12.   Political: Generally speaking, how do you characterize your political viewpoints?

   -    (1-7 scale representing very liberal, liberal, somewhat liberal, moderate, somewhat conservative, conservative, very conservative)

13.   Do you consider yourself a spiritual person?

   -    (1-4 scale representing not spiritual, somewhat spiritual, moderately spiritual, very spiritual)

14.   Do you consider yourself a religious person?

   -    (1-4 scale representing not religious, somewhat religious, moderately religious, very religious)

15.   What is your household's approximate yearly income?

   -    (<10K, 10K-15K, 15K-20K, 20K-25K, 25K-35K, 35-50K, 50K-75K, >75K)