Taxation Without Information?

PLSC 8100: Political Preferences and American Political Behavior

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Abstract

Do voters' preferences for taxation and spending change when provided with basic information about the federal budget? This paper reports results from a survey experiment conducted with 4,100 self-reported registered voters in April 2025. Respondents were first asked to estimate the share of the federal budget going to various spending categories, then randomly assigned to receive either a brief informational paragraph about federal spending and revenue or no additional information, then asked about their preferences for deficit reduction, taxation, and spending on major budget categories. The treatment had minimal effect on deficit reduction preferences and shifted tax preferences for only one category (middle/low-income taxes). However, the information treatment significantly affected spending preferences for four of nine budget items, generally reducing support for increases in Social Security, Medicare, and veterans benefits while increasing support for maintaining current foreign aid levels. Treatment effects varied substantially across partisan groups, age cohorts, and need for cognition levels, with Independents showing the largest shifts. These findings suggest that voter preferences on fiscal policy are more responsive to information about spending programs than about taxation or deficit reduction strategies, though effects remain modest and heterogeneous.

1 Introduction

American voters routinely express contradictory views about fiscal policy: they favor lower deficits while also supporting higher spending on popular programs and opposing tax increases (Teixeira 2000). Political scientists have long debated whether these apparent contradictions reflect genuine ignorance about government finances or more sophisticated attitudes that reconcile competing priorities (Fernández-Albertos and Kuo 2015; Flynn, Nyhan, and Reifler 2017; Lergetporer et al. 2016; Krupnikov et al. 2006; Kuklinski et al. 2000; Kuziemko et al. 2015; Sawulski, Szewczyk, and Kiełczewska 2024; Stantcheva 2021; Roth, Settele, and Wohlfart 2022). Understanding what shapes public opinion on fiscal policy matters for both democratic theory[1] and practical politics, especially given looming fiscal pressures from rising debt service costs and demographic shifts (Bernstein et al. 2025).

This paper examines whether providing voters with basic information about the federal budget affects their preferences for taxation and spending. Previous research has documented widespread misperceptions about government finances in both domestic and international contexts—see Bartels (2005) and Hacker and Pierson (2005) on the 2001 and 2003 Bush tax cuts; Lergetporer et al. (2016) on perceptions of government spending among German voters; and Scotto et al. (2017) on perceptions of foreign aid spending among American and British voters. However, the literature is divided as to whether voter preferences would be different if they were provided with correct information (e.g., Kuklinski et al. 2000; Stantcheva 2021), or whether differences in opinion reflect partisan motivated reasoning (Boslen et al. 2014; Jerit and Barabs 2012; Nyhan and Reifler 2010; Taber and Lodge 2006), or simply sincere disagreement about economic policy (Krupnikov et al. 2006).

[1] If voter preferences for taxation and spending are incoherent—i.e., if voters express a sincere preference for more welfare spending *and* lower taxes *and* deficit reduction—then it is impossible for elites to conduct fiscal policy democratically. If inaccurate voter preferences are responsive to corrective information, this suggests that the media and other institutions and actors which disseminate information about fiscal policy may have an outsized influence on public opinion and ultimately legislation compared to other issue areas where public preferences are more clear-cut.

I contribute to this literature by fielding a survey experiment that randomly assigns self-reported registered US voters to receive factual information about the size and composition of federal spending and revenue before eliciting their fiscal policy preferences.

The experiment reveals several key findings. First, voters systematically misperceive the federal budget, dramatically overestimating spending on education, infrastructure, and foreign aid while underestimating outlays for Social Security, Medicare, and interest payments. These misperceptions are largely consistent across demographic groups, with notable exceptions: Republicans substantially underestimate military spending's budget share, while they and Independents overestimate waste and fraud compared to Democrats.

Second, providing corrective information has minimal impact on deficit reduction preferences and limited effects on tax preferences. The treatment group was slightly more likely to favor keeping middle- and low-income taxes at current levels rather than cutting them, but showed no significant shifts on other tax categories. This stability suggests that attitudes toward taxation may be relatively well-formed and resistant to new information, perhaps reflecting what scholars have termed "symbolic politics" (Sears et al. 1980).

Third, the information treatment had its largest effects on spending preferences, particularly for the programs explicitly mentioned in the treatment text: Social Security, Medicare, and veterans benefits. Highlighting that these three programs (plus Medicaid, defense, and interest payments) account for 75% of federal spending reduced support for increasing their funding, even as majorities still favored expansions, dovetailing with Sawulski, Szewczyk, and Kiełczewska (2024)'s finding from a similar experiment with Polish voters. The treatment also increased support for maintaining current foreign aid levels (similar to the findings in Nair (2018) and Scotto et al. (2017)) while leaving preferences for military spending unchanged.

Fourth, treatment effects varied considerably across subgroups. Contrary to my hypothesis that younger voters would be more responsive to new information, respondents under 30 showed smaller treatment effects overall. Partisan differences emerged primarily on spending rather than taxation: Democrats became more supportive of maintaining foreign aid levels and Republicans of maintaining veterans benefits spending, while Independents showed the largest shifts, becoming less supportive of increases in Social Security, Medicare, veterans benefits, and infrastructure. Respondents classified as high need for cognition did not show systematically larger treatment effects than those with low or mixed need for cognition, contradicting predictions research on information processing.

These findings contribute to ongoing debates about the malleability of public opinion on fiscal policy. While voters do hold systematically inaccurate beliefs about the budget, correcting these beliefs produces only modest preference shifts concentrated on spending rather than taxation or deficit reduction strategies. This pattern suggests that attitudes toward taxation may be more deeply rooted in ideological commitments or personal interests, while spending preferences retain some responsiveness to information about fiscal constraints. The heterogeneity of treatment effects across partisan and demographic groups further underscores that identical information can be processed differently depending on voters' prior beliefs and political identities.

The paper proceeds as follows. Section 2 reviews literature on fiscal policy perceptions, attitudes, and information effects. Section 3 describes the survey design, data sources, and hypotheses. Section 4 presents results on budget perceptions and treatment effects for deficit reduction, taxation, and spending preferences. Section 5 discusses implications, limitations related to sample quality and survey design, and directions for future research. References and an Appendix with additional charts and information about the survey can be found at the end of this paper.

2 Literature review

There is a rich literature on how voters' beliefs about taxation and spending levels differ from reality, and on how additional information can change preferences for fiscal policy. Inaccurate beliefs about fiscal policy are widespread, but the effect of corrective information varies.

Kuklinski et al. (2000) find that inaccurate beliefs about the welfare system—such as the share of Americans on welfare, or the share of welfare recipients who are Black—are widespread, and that many voters are confident about their inaccurate beliefs. Americans frequently underestimate the amount of taxes paid by

the poor and immigrants, often because they fail to consider payroll and sales taxes (Williamson 2017). Roth, Settele, and Wohlfart (2022) find that US voters vastly underestimate the debt-to-GDP ratio and that providing corrective information lowers support for increased spending in all categories, but has no effect on preferences for taxation. Sawulski, Szewczyk, and Kiełczewska (2024) conduct a survey of Polish voters, finding that they underestimate the share of budget going to pensions and overestimate the share going to environmental protection; corrective information has the largest effects for the items with the highest rates of error, reducing support for pension spending while increasing support for environmental spending. Lergetporer et al. (2016) conduct a survey of German voters, finding that providing information about government spending reduces support for increased spending in all categories; a followup experiment on education specifically finds that support for increased education spending falls the most among respondents who underestimated current spending levels.

Scotto et al. (2017) find that providing British and American voters with information about the share of government spending allocated to foreign aid significantly reduces support for foreign aid cuts, although substantial opposition to aid remains even after the treatment. Nair (2018) finds that Americans tend to underestimate where they stand on the global income distribution; corrective information substantially increases support for expanding foreign aid and actual donations to international charities, though effects are larger for liberals. Fernández-Albertos and Kuo (2015) find that individuals often misplace themselves on the income spectrum, and that providing corrective information increases support for progressive taxation among respondents who either perceived themselves as poor *ex ante* or learned that they were poor, with no changes in support among respondents who perceived themselves as rich *ex ante* or learned that they were rich.

Government-sent informational mailers about specific spending programs have been found to increase political knowledge in both the United States and the United Kingdom (Cook et al. 2010; Barnes et al. 2018). On the other hand, Nyhan and Reifler (2010) find evidence for a "backfire effect" of corrective information: telling respondents that tax revenue fell after the 2001 Bush tax cuts led to an *increase* in the share of conservatives who agreed with the statement that the tax cuts increased government revenue. Kuziemko et al. (2015) find that providing information about increased economic inequality increases respondents' stated level of concern about inequality, but has no effect on their support for higher taxes (except for the estate tax) or increased transfer spending. Stantcheva (2021) finds that messaging discussing either the redistributive effects of tax policy or the tradeoff between efficiency and redistribution increase support for progressive income taxes and estate taxes (with substantial heterogeneity of views for Democrats and Republicans); efficiency-only messaging does not change views. Krupnikov et al. (2006) find that providing information about the estate tax makes Democrats more supportive of keeping the tax in place while having no effect on Republicans, suggesting that support for repealing the estate tax reflects sincere disagreement about economic policy rather than ignorance about the incidence of the tax.

Some analyses of the 2001 and 2003 Bush tax cuts find that voters supported the tax cuts because were generally ill-informed about how it would affect their own tax burdens (Bartels 2005; Bartels 2007). Other scholars argue that the 2001 and 2003 tax cuts were unpopular, but that Bush and Republicans in Congress were able to manipulate public opinion by sunsetting popular provisions of the laws and phasing-in the implementation of unpopular provisions, as well as by lying about the economic impacts of the tax cuts (Hacker and Pierson 2005). Another possible explanation is that the effect of additional information on support for the 2001 tax cuts differed across partisanship and ideology, implying that rather than being deceived, reasonable persons might disagree about the long-run economic effects of the tax cuts (Lupia et al. 2007).

In sum, the literature generally finds that voters tend to misperceive the shape and size of government budgets—underestimating the share of spending going toward pension programs and overestimating the share going to foreign aid—while uncovering mixed treatment effects when providing corrective information, ranging from reduced support for all spending items to reinforcing inaccurate beliefs. This paper's contribution is to (a) assess the degree to which American voters' perception of the federal budget differs from reality, and (b) to determine whether providing voters with a bit of basic information about the federal budget meaningfully alters their preferences for deficit reduction, taxation rates, and spending levels. Specifically, the goal of this paper is to test the impact of a short, broad piece of corrective information. Rather than focusing on correcting misperceptions about specific line items of spending, the goal of the treatment is to

provide information about the shape and size of federal tax receipts and outlays, approximating the kind of knowledge that is common among political elites and policy wonks. The next section describes data sources and hypotheses.

3 Data and methodology

Data was drawn from the spring 2025 Yale Youth Poll survey. The Yale Youth Poll surveyed an online sample of 4,100 self-reported registered voters from April 1 to April 3 using Prolific, with an under-30 oversample of 2,025. The survey was conducted in English, and its post-weighting 95% CI margin of error is ±1.9 percentage points for the full sample and ±1.8 percentage points for the youth sample. Results were weighted to ensure a sample that accurately reflects the American population. For the general population sample, results were weighted by age, race, education, gender, and party ID. For the under-30 sample, results were weighted by race, gender, and party ID.[2]

The poll included a number of demographic questions, a pair of questions used to create a measure of respondents' need for cognition, and four questions used for this experiment, summarized in Table 1:

Table 1: Survey Questions and Their Purpose

Question	Purpose
[need_for_cognition]	Measure respondents' tendency to engage in and enjoy effortful cognitive activities
[budget_perceptions]	Measure respondents' beliefs about federal spending allocation across 10 major categories
[split_A]	Provides the treatment message to half of respondents (randomly selected)
[split_B]	Control group receives no message (randomly selected)
[deficit_reduction]	Measure preferences for addressing the federal deficit through spending cuts, tax increases, or combination
[tax_hikes]	Measure support for increasing, maintaining, or decreasing taxes across six categories
[spending_cuts]	Measure support for increasing, maintaining, or decreasing spending across nine federal programs

The need for cognition questions asked respondents to rate on a 5-point agree/disagree scale the extent to which the following two statements were characteristic of them: "I prefer complex to simple problems" and "Thinking is not my idea of fun." Respondents who agreed with the first statement *and* disagreed with the second statement were classified as high need for cognition (NFC); respondents who disagreed with the first statement *and* agreed with the second were classified as low NFC; all other respondents were classified as mixed NFC. (These two questions are taken from Cacioppo et al. (1984).)

This experiment was divided into three stages. First, respondents were asked to estimate how much of every $100 in federal tax revenue is allocated to a list of items in the federal budget. (These answer choices were the ten largest line items in the federal budget based on FY 2025 spending data; respondents' answer choices were required to sum to 100.) Second, respondents were randomly assigned to one of two groups: group A (the treatment group) and group B (the control group). Respondents in the treatment group were presented with the following paragraph of text containing some basic information about the federal budget:

> *Currently, the national debt is just over $36 trillion. Over the last 10 years, annual government spending has averaged $5.5 trillion. 75% of this spending comes from Social Security, Medicare, Medicaid, defense spending, spending on veterans, and interest payments on the debt. Just over*

[2]The author would like to thank the Democratic Innovations Program at the Institution for Social and Policy Studies for funding this survey, as well as Zachary Donnini '25 and Daniel Wang '27 for weighting the results.

50% of federal tax revenue comes from income taxes, about 30% comes from payroll taxes, and just under 10% comes from corporate taxes.

Respondents in the control group received no additional information.

Finally, respondents in both the treatment and the control group were asked three questions: about their preferences for deficit reduction (including an option to say that deficit reduction was not a priority); whether six types of taxes should be increased, decreased, or kept at the same level; and whether spending on the ten largest line items in the federal budget (the same list as used in the first question in the experiment, except that interest payments are omitted) should be increased, decreased, or kept at the same level.

Note that for [**need_for_cognition**] the order of the two statements was randomized; for [**deficit_reduction**] the order of answer choices was randomized; and for [**tax_hikes**] and [**spending_cuts**] the order of taxes and spending items was randomized. Full question wording can be found in the Appendix.

This paper tests the following four hypotheses:

1. **I expect to find that American voters have inaccurate perceptions of the federal budget**. Specifically, I expect that voters will overestimate the share of spending going to foreign aid (in line with findings from Scotto et al. (2017)) and underestimate the share going toward large entitlement programs such as Social Security and Medicare (in line with findings from Sawulski, Szewczyk, and Kiełczewska (2024)).
2. **I expect to find that the treatment will reduce support for increased spending across all categories, with especially large effects for Social Security and Medicare**, in line with Sawulski, Szewczyk, and Kiełczewska (2024) and Roth, Settlele, and Wohlfart (2022).
3. **I expect to find that the effect of providing basic information will be larger for younger respondents (those aged 18-29) than for respondents overall**. Lau and Redlawsk (2008) find that voters tend to accumulate political knowledge with age, and that older voters do not integrate new political information as well as younger voters do. I expect that older voters are more likely to have existing preferences on fiscal policy than younger others (since they have had more time to develop positions on taxation and spending) and are probably more stubborn about those preferences.
4. Finally, **I expect to find the largest treatment effects for respondents who score as high NFC**, followed by mixed NFC respondents and then low NFC respondents. Prior research has found that respondents who score as high on need for cognition are more likely to decrease their approval of both the in-party and the out-party in response to negative information about that party (Arcenaux and Vander Weilen 2013). Therefore, I expect that high NFC respondents will be more likely to incorporate the information in the treatment into their thought process when answering subsequent questions.

These hypotheses are evaluated using χ^2 tests to estimate how likely the differences in the distribution of responses to each question between the treatment and control groups are, assuming that the null hypothesis (the actual treatment effect is 0) is true. The next section discusses the results of applying these tests to the data.

4 Results

On average, respondents correctly estimate the share of federal spending allocated toward the military, but tend to overestimate the share allocated to education, infrastructure, foreign aid. Respondents tend to underestimate how much of the budget is allocated toward Social Security, Medicare, interest payments, and other healthcare programs. These results are what were expected in Hypothesis 1 and fit the pattern observed in Sawulski, Szewczyk, and Kiełczewska (2024)) and Scotto et al. (2017): voters underestimate the share of spending going towards large welfare programs focused on the elderly and overesimate the share going to foreign aid. A balance check confirms that perceptions of government spending did not meaningfully differ between the treatment and control groups (see Appendix Table 4).

These results do not differ meaningfully for respondents under 30 (see Figure 4 in the Appendix), between the treatment and control groups (see Appendix Table 3), or between high, mixed, and low NFC respondents

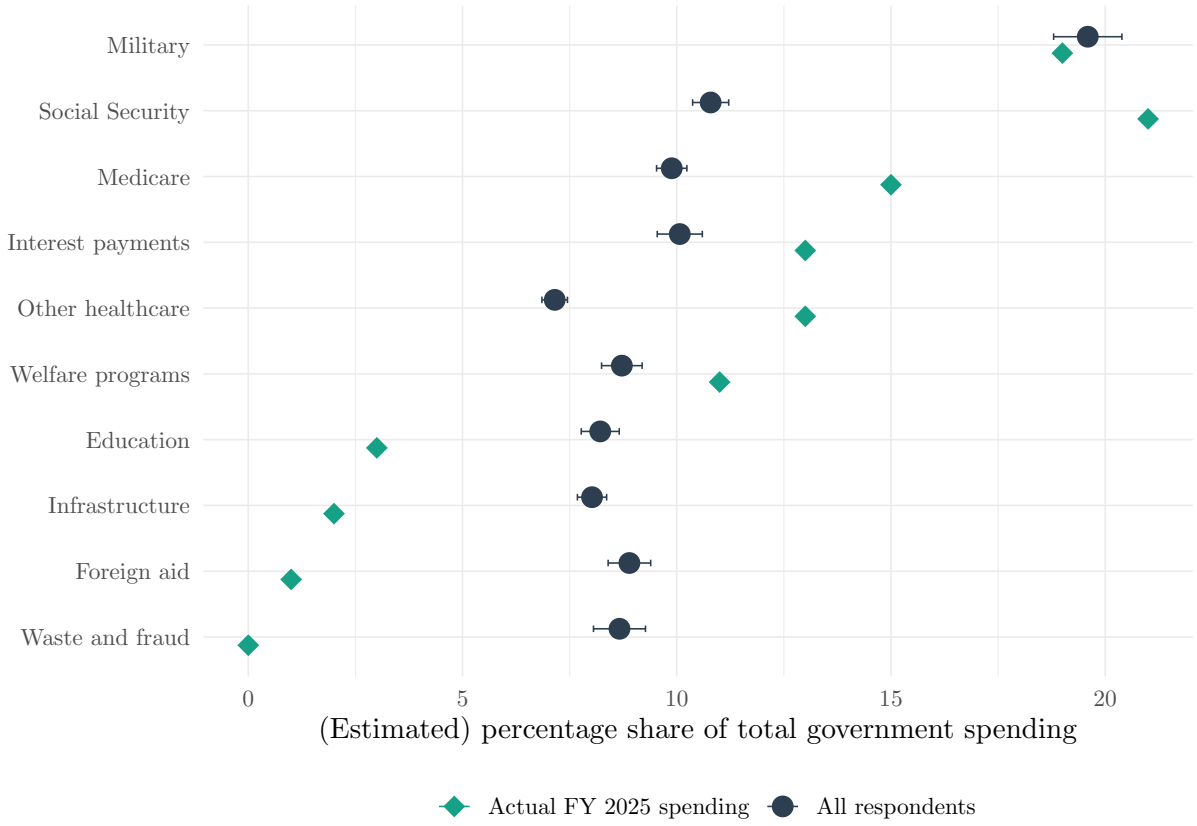


Figure 1: Perceptions of the federal budget vs. reality

(see Appendix Figure 5). There are, however, some notable partisan gaps in perceptions of the federal budget (see Appendix Figure 6). When it comes to military spending, Democrats (23.2%) and Independents (21.2) aren't too far off from the reality (19%). Republicans are much more likely to underestimate what share of the budget goes to the military, saying 14.7% on average. Democrats, Independents, and Republicans are all pretty close to one another in estimating the share of the budget that goes toward Social Security: 11.8%, 10.4%, and 10.3%, respectively, compared to 21% in FY 2025. Similar patterns hold for interest payments, Medicare, foreign aid, welfare programs, education, infrastructure, and other healthcare—Democrats, Independents, and Republicans tend to make similar guesses, and all three groups tend to be off in the same direction and by roughly the same margin. However, Republicans and Independents estimate that a much higher share of the federal budget is lost to waste and fraud—they guess 10.8% and 9.5% respectively, compared to 5.6% for Democrats.[3]

Table 2: Treatment Effect on Deficit Reduction: All Voters

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	46.9	50.5	-3.7
Reduce deficit by raising taxes	10.7	9.2	1.5
Reduce deficit with combination	26.8	24.9	1.9
Deficit reduction not a priority	7.7	8.4	-0.7
Not sure	7.9	6.9	1.0

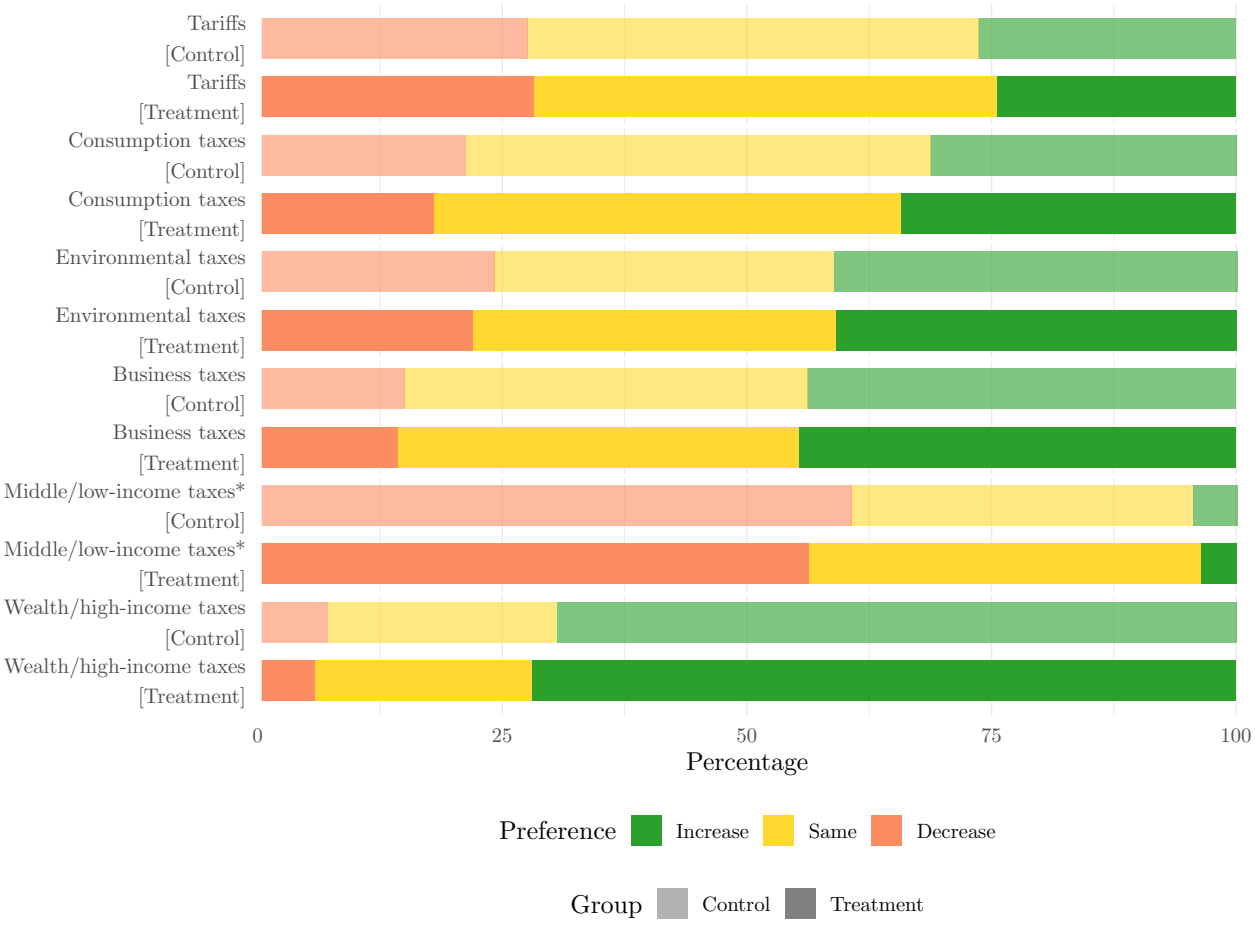
Note: $chi^2 = 0.89$, p = 0.470. Treatment received budget context preamble. n = 4,052.

Providing basic budget information had no effect on the deficit reduction preferences of respondents overall: the differences in the distribution of responses between the treatment and control groups were not statistically significant (see Table 2). This result holds for respondents under 30, Democrats, Republicans, Independents, and high/low/mixed NFC respondents (see Appendix Tables 4-10).

Looking to Figure 2, the treatment did have a statistically significant effect on respondent preferences for one kind of tax: middle/low-income taxes. Providing basic budget information led to a 0.9 percentage point drop in the share of respondents who favored increasing middle/low income taxes (3.6% in the treatment group vs. 4.5% in the control group); a 5.2 percentage point jump in the share who favored keeping middle/low income taxes the same (40.1% in the treatment group vs. 34.9% in the control group); and a 4.4 percentage point drop in the share who favored decreasing middle/low income taxes (56.3% in the treatment group vs. 60.7% in the control group). This data is reproduced for respondents overall and for specific subgroups Tables 11-18 in the Appendix.

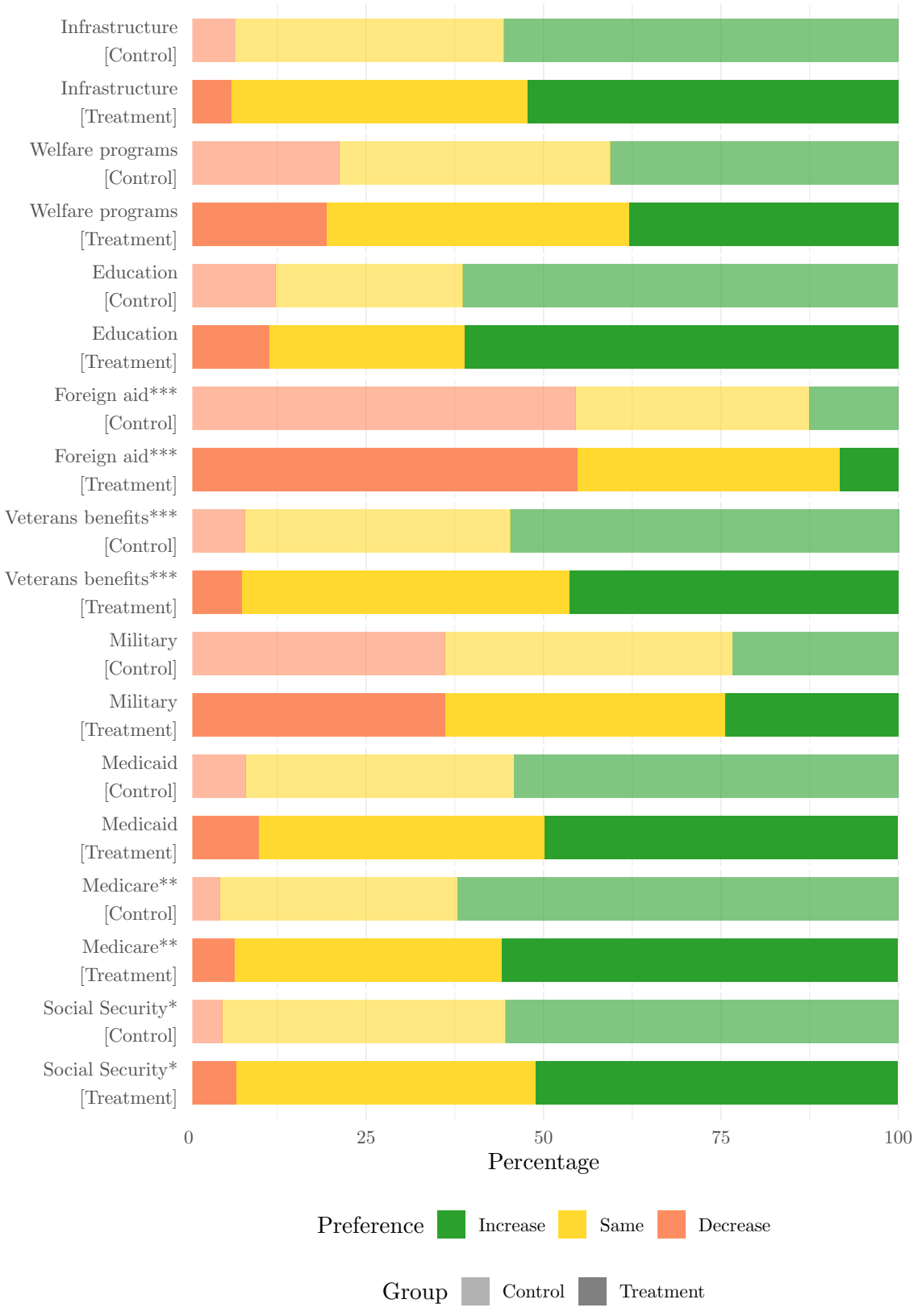
Figure 3 displays results for the spending preferences question for the control and treatment groups. Contrary to Hypothesis 2, the treatment only reduced support for increasing spending on Social Security ($p<0.1$) and Medicaid ($p<0.05$), veterans benefits (<0.01), and foreign aid ($p<0.01$). The treatment made respondents more likely to support maintaining current levels of foreign aid spending, but had almost no effect on the share of respondents favoring foreign aid cuts (in line with Scotto et al. (2017) and Nair (2018)). Note that the treatment message included the following sentence: *"75% of this spending comes from Social Security, Medicare, Medicaid, defense spending, spending on veterans, and interest payments on the debt."* Based on these results, it seems reasonable to say that raising the salience of the relatively high cost of Social Security, Medicare, and veterans benefits (combined) reduced support for spending more on these programs. Nonetheless, it is curious that the treatment has no effect on respondents' (both overall and across the subgroups of interest) preferences for military spending. For respondents under 30, the treatment only had a

[3]Note that the Treasury Department, from which the FY 2025 spending data is sourced, does not actually release figures for how much money is lost to waste and fraud annually. Still, it seems reasonable to assume that it is much less than 8% of the federal budget. According to the Government Accountability Office, the federal government made $236 billion worth of "improper payments" in FY 2023, which comes out to 3.9% of the total budget for that year. 74% of these errors were overpayments, while about 5% were underpayments and 19% were unknown (meaning it was unclear whether they were overpayments or underpayments). Improper payments peaked during the pandemic (FY 2021) and have since come down, though they remain somewhat elevated above pre-pandemic levels.



Note: *** p<0.01, ** p<0.05, * p<0.1. Treatment group received budget context preamble. n=4,052.

Figure 2: Treatment effect on tax preferences



Note: *** p<0.01, ** p<0.05, * p<0.1. Treatment group received budget context preamble. n=4,052.

Figure 3: Treatment effect on spending preferences

statistically significant effect on preferences for spending on education and infrastructure, meaning that the effect was actually *smaller* for younger voters, contrary to what Hypothesis 3 predicted (see Appendix Table 20).

Hypothesis 4 was partially correct: the treatment's effects on spending preferences were larger for high NFC respondents than low NFC respondents, but mixed NFC respondents saw larger treatment effects than either of the other two categories. For high NFC respondents, the treatment had a statistically significant effect on preferences for spending on Social Security and Medicare, with preferences shifting away from increasing spending and towards either maintaining or decreasing spending on the two programs ($p<0.1$; see Appendix Table 24 for more detail).

For low NFC respondents, the treatment only had a statistically significant effect on preferences for spending on education: the treatment group was -16.7 percentage points less likely to favor increasing education spending; +14.3 percentage points more likely to favor maintaining current spending levels; and +2.4 percentage points more likely to favor decreasing spending ($p<0.1$; see Appendix Table 25). For mixed NFC respondents, the treatment had a statistically significant effect on preferences for spending on Medicare, veterans benefits, and foreign aid (see Appendix Table 26).

5 Conclusion and discussion

As discussed in the previous section, the results of this experiment confirm Hypothesis 1. Voters do have inaccurate perceptions of the federal budget, and as predicted they overestimate the share of spending going towards foreign aid while underestimating the share allocated to entitlement spending. We can reject Hypotheses 2 and 3. The treatment reduced support for increased spending some programs, including Social Security and Medicare, but not for all programs. One possible reason for this may be that Social Security and Medicare are explicitly mentioned in the treatment message and identified among the programs responsible for the majority of government spending. The evidence from this experiment indicates that effects were *smaller* for respondents under 30, which is the opposite of what Hypothesis 3 predicted. Hypothesis 4 is partially correct. The effect on spending preferences is larger for high NFC respondents than for low NFC respondents, which lines up with the intuition that individuals with higher cognition are more likely to incorporate new information from the treatment into their thought process when answering subsequent questions. But interestingly, effects are largest for mixed NFC respondents—even though one would expect that they are less likely to incorporate new information than high NFC respondents.

I also find that the treatment has no effect on preferences for deficit reduction, and very limited effects on preferences for taxation. What might account for this? One possible explanation is that voters simply know more about fiscal policy that I give them credit for. The premise of the experiment is that voters know relatively little about the size and makeup of the federal budget and tax base. But if voters already know some of the information in the treatment message, then the effect of the treatment will be blunted, since voters have already incorporated the information that they are receiving. However, there is reason to be skeptical of this explanation, since the experiment shows that voters' perceptions of the federal budget are systemically inaccurate. A more plausible explanation is that voters' preferences on fiscal policy are more robust than I might have assumed. It is possible that attitudes towards "taxes" and "government spending" generally—or specific policies, such as raising taxes on the wealthy or military spending—are formed early in life and remain relatively stable through adulthood. In this sense, one can conceive of attitudes toward fiscal policy as a manifestation of symbolic politics, as discussed in Sears et al. (1980).[4]

There are some potential concerns with the experimental design. Barabas and Jerit (2010) find that real-world government announcements about policy have much smaller impacts on public opinion than do survey experiments which provide information to respondents, suggesting that survey experiments may overestimate the actual effect of new information on public opinion. Bonica (2015) and Barnes, Blumenau, and Lauderdale (2022) argue that survey experiments that require respondents to account for budgetary tradeoffs provide a more meaningful measure of public opinion than survey questions that ask voters whether

[4]For an application of symbolic politics to preferences for housing density, see "The Symbolic Politics of Housing" by David E. Broockman, Christopher S. Elmendorf, and Joshua L. Kalla (preprint, most recently updated October 29, 2025).

spending on certain programs should be increased, decreased, or kept the same. Some of the effects (or lack thereof) recovered in this experiment may be caused by differing levels of numeracy among respondents: Mérola and Hitt (2016) find that numeric information is most persuasive to those with high numeracy—even when it comes from the out-party—while those with low numeracy default to partisan cues. Using graphics, such as those prepared by the Congressional Budget Office, as the treatment would be one way to isolate the persuasive effect of new information from any numeracy effects.

The treatment itself was intentionally written to be a high-level but brief overview of the country's fiscal state of affairs, but this may have come at the cost of vagueness. Respondents were told that annual government spending has averaged $5.5 trillion over the last decade, but not what federal tax receipts have averaged over that same period; they were told that 75% of spending comes from Social Security, Medicare, Medicaid, defense spending, spending on veterans, and interest payments on the debt, but not how much *each* of those items contributes to spending. Testing the effect of real-world messages with partisan or ideological labels might better capture the effect of the sort of information about fiscal policy that voters are likely to encounter in their day-to-day lives.

Another area of concern concern is sample quality. This survey experiment was conducted using an online opt-in sample drawn from Prolific. Online opt-in panels are relatively cheap but tend to be lower quality than other survey modes. Panelists tend to respond to questions faster and are more likely to engage in "straightlining"; compared to the population, they have on average lower incomes, higher unemployment rates, and higher educational attainment. In other words, Prolific panels overrepresent unemployed college students who take online surveys for beer money relative to their share of the electorate overall. These characteristics tend to correlate with (a) being more politically liberal and (b) being more politically engaged relative to the population. While the survey is weighted to be as representative of American registered voters as possible, it is difficult to weight for political engagement; it is possible that the sample being relatively highly engaged explains some of the smaller-than-expected effect sizes.

Nonetheless, these results do suggest that voter preferences on fiscal policy are at least *somewhat* responsive to new information. These findings carry important implications for both democratic theory and political practice. For democratic theory, the results offer a nuanced picture of voter competence on fiscal policy. Voters do hold systematically inaccurate beliefs about the federal budget, but these beliefs are at least partially responsive to corrective information, particularly regarding spending programs. This suggests that voter preferences, while imperfect, are not entirely incoherent. However, we observe heterogeneous treatment effects, which may indicate that identical factual information is bring processed differently by different voters. This complicates the optimistic view that simply providing better information can resolve disagreements about fiscal policy, since partisans appear to update their preferences selectively based on the same set of facts.

For political practitioners, this paper's results suggest that new information alone is unlikely to dramatically shift public opinion on taxation or deficit reduction strategies. These may be areas where attitudes are more deeply rooted by ideological commitments or symbolic affects. However, the modest but statistically significant effects on spending preferences indicate that public support for entitlement programs like Social Security and Medicare retains some responsiveness to information about fiscal constraints, even if majorities continue to favor maintaining or expanding these programs. As policymakers confront the fiscal pressures of an aging population and rising debt service costs, they face an electorate whose preferences are neither purely ignorant nor fully informed, neither completely malleable nor entirely fixed.

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Appendix

The full list of questions for the spring 2025 Yale Youth Poll can be found here, and a link to the published results of the poll can be found here. The full wording of questions relevant to this paper are reproduced below:

[**need_for_cognition**] For each of the statements below, please indicate to what extent the statement is characteristic of you.

- I prefer complex to simple problems.
- Thinking is not my idea of fun.

  Answer choices: *Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree*

[**budget_perceptions**] For every $100 in tax revenue the US federal government receives, how much do you think goes to:

- Interest payments on the federal debt
- Social Security
- Medicare
- Other healthcare spending
- The military
- Foreign aid
- Education
- Welfare programs
- Infrastructure and transportation
- Waste and fraud

  Answer choices: *Sliding scale in Qualtrics for each item, set so total must sum to 100*

[**split_A**] *Display*: "Currently, the national debt is just over $36 trillion. Over the last 10 years, annual government spending has averaged $5.5 trillion. 75% of this spending comes from Social Security, Medicare, Medicaid, defense spending, spending on veterans, and interest payments on the debt. Just over 50% of federal tax revenue comes from income taxes, about 30% comes from payroll taxes, and just under 10% comes from corporate taxes."

[**split_B**] *(No additional information.)*

[**deficit_reduction**] When it comes to reducing the deficit — the shortfall between what the government spends and what it collects in revenue each year, requiring borrowing to cover the gap — which approach do you prefer the most?

- Reduce the deficit mainly by cutting government spending
- Reduce the deficit mainly by raising taxes
- Reduce the deficit with a combination of tax hikes and spending cuts
- Don't think deficit reduction is a priority
- Not sure

[**tax_hikes**] What do you think of the following types of taxes?

- Wealth and high-income taxes (e.g., taxes on billionaires, millionaires, and income over $400,000)
- Middle- and low-income taxes (e.g., income taxes on people making less than $100,000)
- Business taxes (e.g., corporate taxes, payroll taxes)
- Environmental taxes (e.g., taxes on greenhouse gas emissions, or other pollution)
- Consumption taxes (e.g., excise taxes on cigarettes/alcohol, sales taxes)
- Taxes on imported goods (tariffs)

Answer choices: *Should be increased, Should be kept at the same level Should be decreased*

[spending_cuts] When it comes to government spending, what do you think of the following programs?

- Social Security
- Medicare
- Medicaid
- The military
- Veterans' affairs
- Foreign aid
- Education
- Welfare programs
- Infrastructure and transportation

Answer choices: *Should spend more on, Should keep spending the same amount, Should spend less on*

Table 5 provides a balance check on whether perceptions of the federal budget differed between the treatment and control groups, *before* the treatment group was provided with the treatment information. All p-values are >0.05, meaning there is no statistically significant difference in perceptions of any spending category's share of the overall budget between the two groups.

Table 3: Budget Perceptions vs. Reality: Treatment and Control Groups

Category	FY 2025 %	Treatment %	Control %	p-value
Interest payments on federal debt	13	9.9	10.2	0.556
Social Security	21	10.9	10.7	0.677
Medicare	15	10.0	9.8	0.63
Other healthcare spending	13	7.3	7.0	0.429
Military	11	19.7	19.4	0.708
Foreign aid	3	8.7	9.1	0.509
Education	3	8.1	8.3	0.752
Welfare programs	11	8.7	8.7	0.933
Infrastructure and transportation	2	8.2	7.8	0.221
Waste and fraud	0	8.4	8.9	0.427

Note: Treatment received budget context preamble before being asked subsequent questions. *** p<0.01, ** p<0.05, * p<0.1

Perceptions of the federal budget did not differ significantly between respondents under 30 and all respondents (see Figure 4), nor between high/low/mixed NFC respondents (Figure 5).

However, perceptions did differ between Democrats, Republicans, and Independents (see Figure 6). In particular, Democrats had a lower estimate of the share of federal spending going to waste or fraud than Republicans and Independents, while Republicans tended to underestimate the share of spending going towards the military compared to Democrats and Independents.

Treatment effect on deficit reduction preferences across subgroups

As can be seen from the rightmost columns in Tables 4-10, the treatment had no effect on deficit reduction preferences for any subgroup.

Treatment effect on tax preferences across subgroups

For respondents under 30, the treatment had no effect on preferences for middle/low-income taxes (see Table 12). However, the treatment increased both the share favoring higher wealth/high-income taxes and the share favoring higher consumption taxes by 5.2 percentage points (p<0.05). The treatment led to a -7.3pp

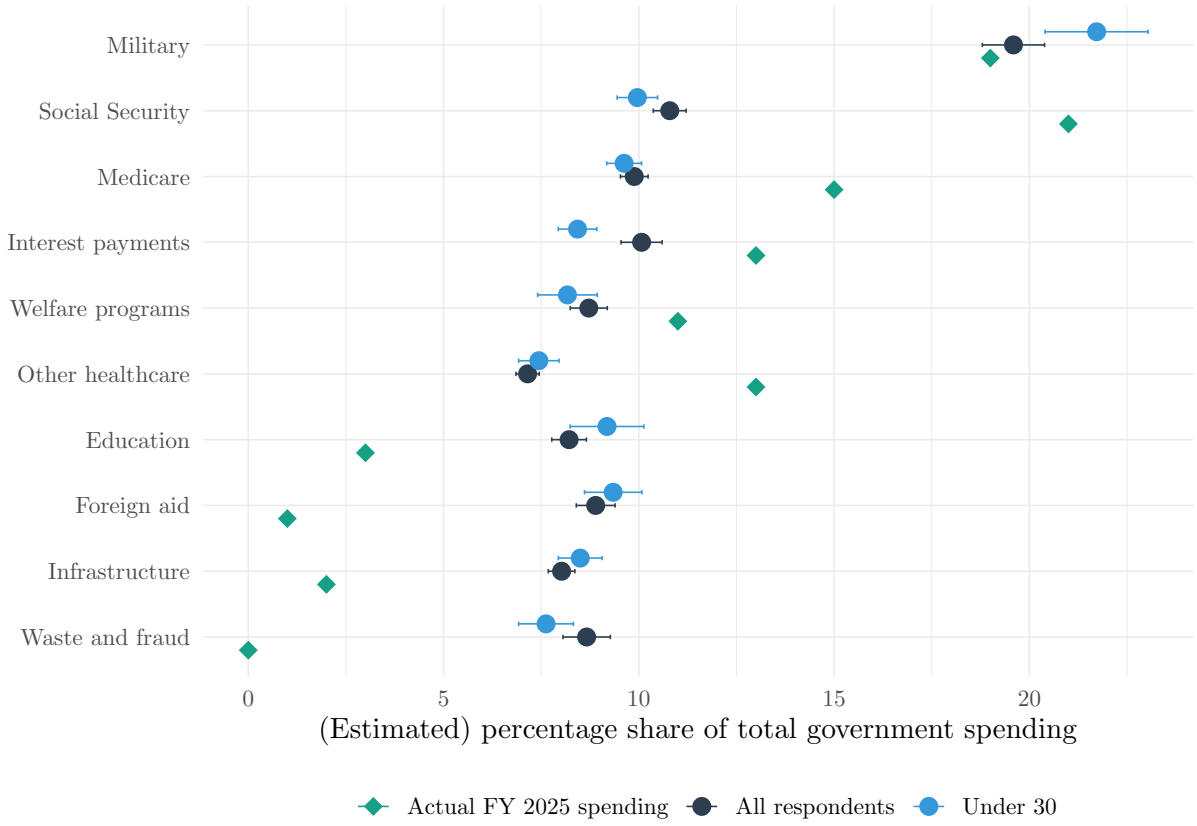

Figure 4: Perceptions of the federal budget vs. reality, by age group

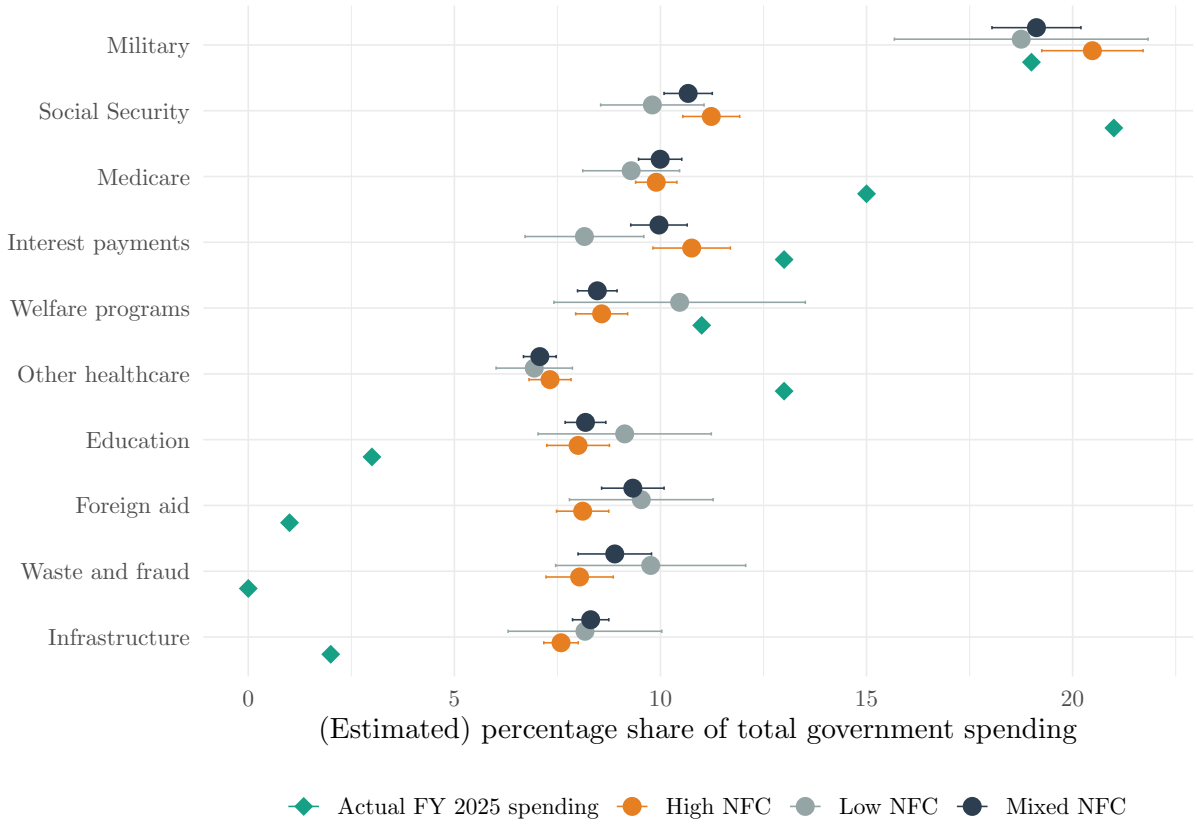

Figure 5: Perceptions of the federal budget vs. reality, by need for cognition score

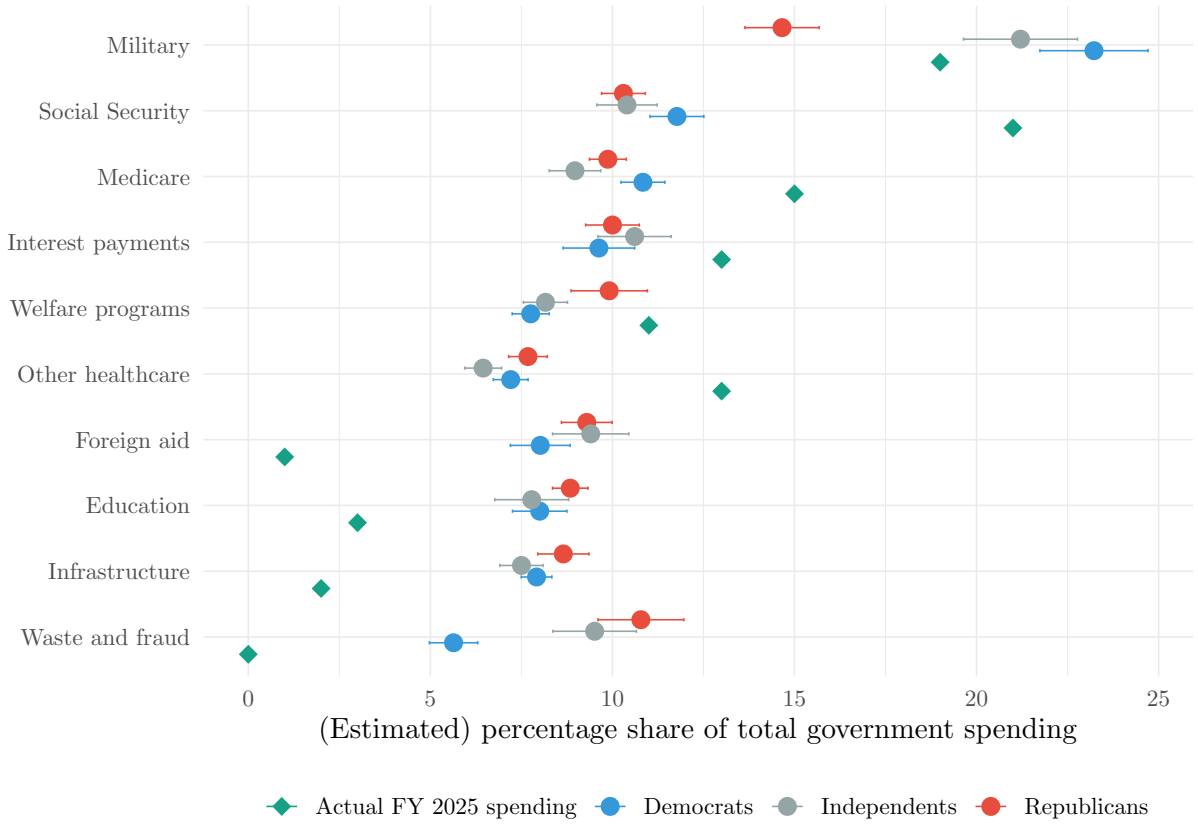

Figure 6: Perceptions of the federal budget vs. reality, by partisanship

drop in the share of respondents under 30 who wanted to keep wealth/high-income taxes the same and a +2.1pp rise in the share who wanted to decrease wealth/high-income taxes. For consumption taxes, the treatment reduced the share who wanted to keep them the same by -9pp and increased the share who wanted to decrease them by +3.7pp.

For Democrats, the treatment only had a statistically significant effect on preferences for consumption taxes: the share who favored increasing them rose by +5.2 percentage points; the share favoring keeping them the same rose by +0.7 percentage points; and the share favoring decreasing them fell by -5.8 percentage points ($p<0.1$; see Table 13). For Republicans, the treatment only had a statistically significant effect on preferences for middle/low-income taxes: the share who favored increasing them fell by -0.8 percentage points; the share favoring keeping them the same rose by +11.7 percentage points; and the share favoring decreasing them fell by -10.9 percentage points ($p<0.01$; see Table 14).

For high NFC respondents, the treatment only had a statistically significant effect on preferences for middle/low-income taxes: the share who favored increasing them fell by -0.6 percentage points; the share favoring keeping them the same rose by +8.5 percentage points; and the share favoring decreasing them fell by -7.8 percentage points ($p<0.1$; see Table 16). There were no statistically significant treatment effects for Independents (Table 15), low NFC (Table 17), or mixed NFC respondents (Table 18).

Treatment effects on spending preferences across subgroups

For Democrats, the treatment only had a statistically significant effect on preferences for spending on foreign aid (see Table 21). The treatment group was -6.9 percentage points less likely to favor increasing foreign aid spending; +7.2 percentage points more likely to favor maintaining current spending levels; and -0.3 percentage points less likely to favor decreasing spending ($p<0.05$). For Republicans, the treatment only had a statistically significant effect on preferences for spending on veterans benefits (see Table 22). The treatment group was -3.9 percentage points less likely to favor increasing spending on veterans benefits; +7 percentage points more likely to favor maintaining current spending levels; and -3.2 percentage points less likely to favor decreasing spending ($p<0.1$). For Independents, the treatment had a statistically significant effect on preferences for spending on Social Security, Medicare, veterans benefits, and infrastructure (see Table 23).

Table 4: Treatment Effect on Deficit Reduction: Under 30

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	48.0	48.4	-0.4
Reduce deficit by raising taxes	12.2	12.0	0.2
Reduce deficit with combination	23.0	21.0	2.0
Deficit reduction not a priority	6.9	7.2	-0.3
Not sure	9.9	11.4	-1.5

Note: $chi^2 = 0.24$, p = 0.908. Treatment received budget context preamble. n = 1,890.

Table 5: Treatment Effect on Deficit Reduction: Democrats

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	23.9	29.5	-5.6
Reduce deficit by raising taxes	17.5	13.1	4.4
Reduce deficit with combination	38.7	36.0	2.7
Deficit reduction not a priority	11.9	11.9	0.0
Not sure	7.9	9.5	-1.5

Note: $chi^2 = 1.20$, p = 0.308. Treatment received budget context preamble. n = 1,514.

Table 6: Treatment Effect on Deficit Reduction: Republicans

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	67.8	73.0	-5.2
Reduce deficit by raising taxes	7.5	7.1	0.4
Reduce deficit with combination	16.3	14.4	1.8
Deficit reduction not a priority	2.9	1.6	1.3
Not sure	5.5	3.9	1.7

Note: $chi^2 = 0.83$, p = 0.508. Treatment received budget context preamble. n = 1,520.

Table 7: Treatment Effect on Deficit Reduction: Independents

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	48.9	48.0	0.9
Reduce deficit by raising taxes	6.8	7.2	-0.3
Reduce deficit with combination	25.5	24.9	0.6
Deficit reduction not a priority	8.3	12.1	-3.8
Not sure	10.4	7.8	2.6

Note: $chi^2 = 0.66$, p = 0.622. Treatment received budget context preamble. n = 1,012.

Table 8: Treatment Effect on Deficit Reduction: High NFC

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	47.9	53.1	-5.2
Reduce deficit by raising taxes	10.8	7.8	3.0
Reduce deficit with combination	30.0	27.3	2.7
Deficit reduction not a priority	7.5	7.9	-0.5
Not sure	3.9	3.9	0.0

Note: $chi^2 = 0.84$, p = 0.498. Treatment received budget context preamble. n = 1,554.

Table 9: Treatment Effect on Deficit Reduction: Low NFC

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	55.2	52.1	3.0
Reduce deficit by raising taxes	6.9	7.8	-0.9
Reduce deficit with combination	16.7	17.7	-0.9
Deficit reduction not a priority	12.3	12.6	-0.2
Not sure	8.9	9.8	-0.9

Note: $chi^2 = 0.05$, p = 0.996. Treatment received budget context preamble. n = 396.

Table 10: Treatment Effect on Deficit Reduction: Mixed NFC

Response	Treatment %	Control %	Diff (T-C)
Reduce deficit by cutting spending	44.5	48.3	-3.8
Reduce deficit by raising taxes	11.4	10.6	0.9
Reduce deficit with combination	26.6	24.7	2.0
Deficit reduction not a priority	6.9	7.8	-0.9
Not sure	10.5	8.6	1.9

Note: $chi^2 = 0.54$, p = 0.703. Treatment received budget context preamble. n = 2,102.

Table 11: Treatment Effect on Tax Preferences: All Voters

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	72.0	69.4	22.2	23.4	5.8	7.2	0.391
Middle/low-income taxes	3.6	4.5	40.1	34.9	56.3	60.7	0.067*
Business taxes	44.7	43.8	41.0	41.2	14.3	15.0	0.896
Environmental taxes	40.9	41.2	37.1	34.7	22.0	24.2	0.49
Consumption taxes	34.3	31.3	47.7	47.5	18.0	21.3	0.18
Tariffs	24.4	26.3	47.4	46.1	28.2	27.6	0.682

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=4,052. *** p<0.01, ** p<0.05, * p<0.1

Table 12: Treatment Effect on Tax Preferences: Under 30

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	74.8	69.6	18.5	25.8	6.7	4.6	0.017**
Middle/low-income taxes	4.3	6.4	44.1	40.7	51.6	52.8	0.248
Business taxes	46.1	40.4	37.9	41.8	16.0	17.7	0.264
Environmental taxes	45.8	44.3	34.8	37.8	19.4	17.9	0.632
Consumption taxes	34.3	29.1	44.9	53.9	20.8	17.1	0.025**
Tariffs	18.1	19.2	48.9	46.7	33.0	34.1	0.802

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,890. *** p<0.01, ** p<0.05, * p<0.1

Table 13: Treatment Effect on Tax Preferences: Democrats

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	91.2	90.6	7.3	7.0	1.5	2.4	0.615
Middle/low-income taxes	2.5	3.4	43.6	43.7	53.9	52.9	0.754
Business taxes	67.4	65.9	27.2	27.3	5.5	6.9	0.739
Environmental taxes	56.9	61.1	32.7	27.2	10.4	11.6	0.345
Consumption taxes	41.0	35.8	47.9	47.2	11.1	16.9	0.078*
Tariffs	9.0	13.4	50.1	46.0	41.0	40.6	0.22

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,514. *** p<0.01, ** p<0.05, * p<0.1

Table 14: Treatment Effect on Tax Preferences: Republicans

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	51.5	49.7	38.2	38.8	10.3	11.5	0.857
Middle/low-income taxes	5.9	6.7	41.2	29.5	52.9	63.8	0.007***
Business taxes	24.7	26.9	55.2	48.3	20.0	24.8	0.19
Environmental taxes	27.6	24.1	42.3	37.6	30.1	38.3	0.105
Consumption taxes	31.7	28.9	46.2	46.9	22.0	24.2	0.694
Tariffs	39.0	41.8	42.5	41.6	18.5	16.6	0.729

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,520. *** p<0.01, ** p<0.05, * p<0.1

Table 15: Treatment Effect on Tax Preferences: Independents

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	73.7	70.1	20.9	23.2	5.4	6.6	0.691
Middle/low-income taxes	2.4	3.2	35.1	31.1	62.5	65.7	0.61
Business taxes	42.0	40.3	40.5	47.0	17.5	12.7	0.257
Environmental taxes	38.2	39.8	36.0	38.5	25.8	21.8	0.615
Consumption taxes	29.9	29.9	49.1	47.5	20.9	22.6	0.903
Tariffs	25.1	22.8	49.9	50.2	24.9	27.0	0.801

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,012.

Table 16: Treatment Effect on Tax Preferences: High NFC

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	76.3	71.9	18.6	20.4	5.1	7.6	0.332
Middle/low-income taxes	2.6	3.3	44.8	36.3	52.6	60.4	0.079*
Business taxes	50.0	46.8	36.3	38.9	13.8	14.3	0.722
Environmental taxes	44.4	40.9	32.3	36.3	23.3	22.8	0.558
Consumption taxes	38.3	31.8	44.3	49.4	17.4	18.8	0.213
Tariffs	27.2	27.7	45.1	46.8	27.7	25.5	0.811

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,554. *** p<0.01, ** p<0.05, * p<0.1

Table 17: Treatment Effect on Tax Preferences: Low NFC

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	70.2	74.2	23.3	17.7	6.5	8.0	0.69
Middle/low-income taxes	1.6	5.9	32.8	31.6	65.6	62.6	0.246
Business taxes	39.9	48.2	45.4	33.0	14.7	18.8	0.303
Environmental taxes	39.4	41.2	41.3	32.9	19.3	25.9	0.458
Consumption taxes	32.6	35.0	52.1	42.7	15.4	22.3	0.383
Tariffs	20.5	19.6	50.4	44.7	29.1	35.6	0.68

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=396.

Table 18: Treatment Effect on Tax Preferences: Mixed NFC

Tax Type	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Wealth/high-income taxes	69.4	66.6	24.5	26.7	6.1	6.7	0.678
Middle/low-income taxes	4.7	5.0	38.3	34.5	57.0	60.5	0.498
Business taxes	41.9	40.7	43.5	44.6	14.5	14.7	0.931
Environmental taxes	38.9	41.3	39.5	33.8	21.6	24.9	0.223
Consumption taxes	31.9	30.1	49.2	47.0	18.9	22.9	0.379
Tariffs	23.2	26.6	48.4	45.9	28.3	27.5	0.537

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=2,102.

Table 19: Treatment Effect on Spending Preferences: All Voters

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	51.0	55.4	42.2	39.9	6.7	4.7	0.078*
Medicare	55.8	62.1	37.7	33.5	6.4	4.4	0.016**
Medicaid	49.8	54.2	40.2	37.8	9.9	8.0	0.157
Military	24.4	23.4	39.5	40.5	36.1	36.1	0.871
Veterans benefits	46.4	54.8	46.1	37.4	7.5	7.9	0.001***
Foreign aid	8.3	12.6	37.0	32.9	54.7	54.5	0.008***
Education	61.1	61.3	27.6	26.4	11.3	12.2	0.782
Welfare programs	37.9	40.6	42.7	38.2	19.4	21.2	0.18
Infrastructure	52.3	55.6	41.7	37.8	6.0	6.6	0.29

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=4,052. *** p<0.01, ** p<0.05, * p<0.1

Table 20: Treatment Effect on Spending Preferences: Under 30

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	41.7	42.6	48.4	50.8	9.9	6.5	0.143
Medicare	56.0	60.6	35.6	33.1	8.4	6.3	0.333
Medicaid	52.8	57.9	38.8	33.9	8.4	8.2	0.315
Military	20.5	20.1	37.3	34.2	42.2	45.8	0.538
Veterans benefits	37.8	42.3	49.4	44.8	12.8	12.8	0.353
Foreign aid	10.1	12.4	39.9	36.7	50.0	50.9	0.434
Education	69.5	77.0	23.9	16.7	6.6	6.3	0.024**
Welfare programs	43.9	49.3	41.8	37.6	14.3	13.0	0.283
Infrastructure	54.9	62.2	39.8	33.8	5.3	3.9	0.072*

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,890. *** p<0.01, ** p<0.05, * p<0.1

Table 21: Treatment Effect on Spending Preferences: Democrats

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	60.6	64.1	37.5	32.8	1.9	3.1	0.248
Medicare	67.2	72.2	31.2	25.3	1.7	2.5	0.185
Medicaid	62.7	69.8	34.9	27.2	2.4	3.0	0.149
Military	12.2	8.9	36.6	41.5	51.2	49.6	0.293
Veterans benefits	48.6	55.5	44.5	37.2	6.9	7.3	0.136
Foreign aid	11.3	18.2	57.4	50.2	31.3	31.6	0.033**
Education	77.8	77.4	20.2	19.7	2.0	2.8	0.815
Welfare programs	56.7	59.6	37.5	34.1	5.8	6.3	0.705
Infrastructure	65.5	59.8	32.3	35.9	2.3	4.3	0.17

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,514. *** p<0.01, ** p<0.05, * p<0.1

Table 22: Treatment Effect on Spending Preferences: Republicans

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	46.5	46.6	44.9	47.5	8.6	5.8	0.386
Medicare	49.7	51.5	40.2	41.5	10.1	7.1	0.385
Medicaid	39.1	38.0	43.9	48.8	17.0	13.1	0.317
Military	45.2	43.6	41.4	41.8	13.5	14.5	0.897
Veterans benefits	48.1	52.0	45.3	38.3	6.6	9.8	0.084*
Foreign aid	7.2	9.9	23.1	20.4	69.8	69.7	0.392
Education	46.7	50.1	35.8	30.0	17.5	19.8	0.347
Welfare programs	21.3	22.6	45.9	41.7	32.8	35.7	0.577
Infrastructure	42.2	47.3	50.6	43.6	7.2	9.2	0.229

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,520. *** p<0.01, ** p<0.05, * p<0.1

Table 23: Treatment Effect on Spending Preferences: Independents

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	45.7	57.0	44.4	37.8	9.9	5.2	0.02**
Medicare	50.3	63.7	42.1	32.9	7.6	3.4	0.005***
Medicaid	47.6	57.1	42.1	35.4	10.3	7.5	0.122
Military	15.0	15.7	40.5	38.8	44.5	45.5	0.937
Veterans benefits	42.2	57.1	48.7	36.4	9.0	6.5	0.005***
Foreign aid	6.3	9.5	30.2	29.1	63.6	61.4	0.425
Education	58.7	57.1	26.8	29.4	14.5	13.5	0.832
Welfare programs	35.7	40.5	44.9	38.8	19.4	20.7	0.428
Infrastructure	49.1	59.6	42.2	34.2	8.7	6.2	0.085*

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,012. *** p<0.01, ** p<0.05, * p<0.1

Table 24: Treatment Effect on Spending Preferences: High NFC

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	48.5	54.2	43.1	41.3	8.3	4.5	0.086*
Medicare	53.6	62.2	39.4	32.8	7.0	5.0	0.083*
Medicaid	49.4	53.1	40.0	39.0	10.5	7.9	0.442
Military	21.1	19.7	40.0	39.1	38.9	41.2	0.823
Veterans benefits	49.1	51.1	43.3	40.5	7.6	8.4	0.745
Foreign aid	7.9	10.5	36.3	33.4	55.8	56.1	0.397
Education	65.2	61.6	23.0	24.3	11.8	14.1	0.624
Welfare programs	38.2	42.8	41.1	36.4	20.7	20.9	0.435
Infrastructure	59.5	54.7	36.7	38.6	3.8	6.7	0.185

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=1,554. *** p<0.01, ** p<0.05, * p<0.1

Table 25: Treatment Effect on Spending Preferences: Low NFC

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	51.4	58.6	45.2	35.0	3.4	6.4	0.24
Medicare	60.5	59.6	36.1	33.3	3.4	7.1	0.472
Medicaid	54.6	55.7	37.4	33.2	8.0	11.1	0.718
Military	27.8	28.7	43.9	41.9	28.3	29.5	0.964
Veterans benefits	51.1	60.0	40.1	31.6	8.8	8.4	0.514
Foreign aid	7.9	12.3	29.9	34.6	62.2	53.2	0.477
Education	53.9	70.6	37.2	22.9	8.9	6.5	0.071*
Welfare programs	34.3	45.9	47.4	33.1	18.3	21.0	0.159
Infrastructure	45.5	58.7	48.6	32.3	5.9	9.0	0.122

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=396. *** p<0.01, ** p<0.05, * p<0.1

Table 26: Treatment Effect on Spending Preferences: Mixed NFC

Program	Inc T	Inc C	Same T	Same C	Dec T	Dec C	p
Social Security	52.7	55.6	41.0	39.9	6.3	4.6	0.449
Medicare	56.5	62.5	36.9	34.1	6.6	3.4	0.028**
Medicaid	49.2	54.7	41.0	37.8	9.9	7.5	0.217
Military	26.1	25.1	38.2	41.2	35.8	33.6	0.666
Veterans benefits	43.6	56.4	49.3	36.2	7.1	7.4	0***
Foreign aid	8.7	14.2	38.9	32.1	52.4	53.7	0.014**
Education	59.6	59.2	29.0	28.7	11.4	12.0	0.962
Welfare programs	38.4	37.9	42.9	40.5	18.7	21.6	0.565
Infrastructure	48.7	55.6	43.8	38.3	7.5	6.1	0.145

Note: Inc=Increase, Same=Keep same, Dec=Decrease. T=Treatment, C=Control. n=2,102. *** p<0.01, ** p<0.05, * p<0.1