

# Misinformation and Threats to Self-Interest\*

Mathieu Turgeon<sup>†</sup>

University of Western Ontario

`mturgeo4@uwo.ca`

ORCID: <https://orcid.org/0000-0003-0134-4027>

Alessandro Freire

Instituto Brasileiro de Ensino, Desenvolvimento e Pesquisa — IDP

`alessandro.freire@idp.edu.br`

ORCID: <https://orcid.org/0000-0003-3696-1092>

---

\*This study was originally pre-registered at EGAP (Registration ID: 20190522AA). Details are now available in the OSF registry at the following url: <https://osf.io/8etrw>.

<sup>†</sup>Corresponding author.

# Abstract

Is misinformation influential when the false information it conveys *directly* threatens one's self-interest? We adopt a vignette experiment to examine how self-interest affects support for government policies among those whose interests are at stake. In 2019, the Bolsonaro government in Brazil was pushing hard to pass a major reform of social security through Congress. To bolster public support, false information was being circulated on social media about what could be some of the consequences if the government failed to reform social security. These false messages appeared as large and tangible material threats to some segments of society. We explore the extent to which these fake threats were successful in increasing support for social security reform among the targeted groups. Our findings show that they did not. They actually backfired.

**Word count:** 6258

**Keywords:** misinformation; self-interest; vignette experiment; backfire effect; reactance theory; Brazil

# Misinformation and Threats to Self-Interest

There is a growing body of literature that examines the relationship between misinformation and political attitudes and behaviors. From this work, we know that misinformation comes in different flavors. Sometimes misinformation is used to discredit a political figure or public policy. At other times, misinformation serves as a weapon to speak ill of groups of people and to perpetuate racial and/or religious prejudice. The content of the misinformation can target one's values, material interests, political preferences, worldviews, or lived experiences to achieve its goal. So far, little attention has been paid to the *nature* of the misinformation being circulated and how it may affect people differently. We hope to contribute to this gap in the literature by proposing to examine how *misinformation that threatens self-interest* may influence the attitudes of members of the targeted group. We adopt a pre-registered vignette experiment applied to a large sample of Brazilian voters to examine this question.<sup>1</sup>

In 2019, the Bolsonaro government was pushing for a major social security reform.<sup>2</sup> The congressional coalition supporting the government and other segments of society were eager to approve such reform to alleviate Brazil's troubled public finances. Many other segments of society, however, were opposed to the reform and feared workers would lose hard-gained benefits if adopted. In an attempt to move public opinion in favor of the reform, misinformation was being circulated on social media and the Internet about the *possible consequences* of a failure to reform social security.<sup>3</sup> Threats to specific segments of society if the reform were to fail were common and included cuts to *Bolsa Família*, a large conditional cash transfer program for poor families, freezing salaries for public servants, and others. The various disinformation campaigns sought to increase support for social security reform by threatening the self-interest of specific groups of society like *Bolsa Família* recipients,

---

<sup>1</sup>This study was originally pre-registered at EGAP and can now be found in the OSF registry. To guarantee the anonymity of the authors, we present the details about our pre-analysis plan in section A of the Online Appendix. This study also received human subjects approval from the ethics board of a large research-oriented university.

<sup>2</sup>We use social security reform and pension reform interchangeably to refer to that same reform pushed forward by the Bolsonaro government in 2019.

<sup>3</sup>Note that misinformation was also being circulated to undermine the reform.

public servants, car owners, etc. Thus, we ask: is misinformation influential when the false information it conveys *directly* threatens one’s self-interest?

We fielded a survey experiment in May and June of 2019 when the social security reform was extensively debated in the Brazilian lower chamber. We randomly assigned participants to read false messages about what the government intended to do if social security reform failed to be adopted. We expected support for the reform to be greater among those whose interests were directly affected by its failure, as aimed by these disinformation campaigns. Surprisingly, we find that support for the reform *decreased* among members of the targeted groups, suggesting that disinformation campaigns can backfire and that psychological reactance might play an important role in how citizens perceive threats to their own interests, including false ones. Psychological reactance occurs when individuals perceive their autonomy threatened, leading coercive actions not only to fail but to backfire. We also find, contrary to expectations, that those who are more inclined to engage in cognitive reflection or knowledgeable about politics do not react much differently from those who are less cognitively engaged or knowledgeable to misinformation that threatens their self-interest. We do find, however, that partisans whose interests are at stake react differently. Precisely, those who are more supportive of the Bolsonaro government show stronger rejection of the pension reform following exposure to the misinformation.

## **Self-interest, misinformation, and politics**

The portrait of citizens who pursue first and foremost their personal interests when voting or giving opinions on public affairs has been the subject of long and intense debates in political science. It is generally believed that self-interest plays a minor role in how voters perceive political issues and make political choices (Achen and Bartels, 2017; Sears et al., 1980), except when “the material benefits or harms of a proposed policy are substantial, imminent and well publicized” (Kinder, 1998, p. 808). That is, even if economic self-interest does not generally play a major role in voter behavior or in shaping public opinion, there are

conditions in which self-interest does affect voters' preferences significantly, as in the cases of car insurance reforms (Lupia, 1994), redistribution of earnings (Demel et al., 2019), housing development (Marble and Nall, 2021; Wood, 2020), health insurance (Reny and Sears, 2020; Haselswerdt, 2020), trade agreements (Maria Schaffer and Spilker, 2019), opioid treatment policy (de Benedictis-Kessner and Hankinson, 2019), artificial intelligence regulation (Heinrich and Witko, 2024), and social security (Campbell, 2002; Chong et al., 2001), to name a few.

If self-interest can affect how voters perceive public affairs, could *misinformation* lead them to support policies that they would not necessarily support otherwise only because their current interests are at stake? More specifically, can (false) threats to voters' self-interest lead them to approve government actions to avoid personal losses in the short run? A growing literature on misinformation demonstrates that voters' preferences and attitudes are affected by incorrect information (Bastick, 2021; Thorson, 2016; van Huijstee et al., 2022; Nyhan, 2020a), but how about when the misinformation threatens one's self-interest? While the literature on misinformation is vast (see, for example, Nyhan, 2021; Batista Pereira et al., 2022, 2023; Ha et al., 2021; Jerit and Zhao, 2020; Lazer et al., 2018; Roozenbeek et al., 2020), no studies have yet investigated the interplay between self-interest and misinformation. We argue that misinformation that threatens one's self-interest may achieve its objective if the expected losses are large and tangible like suggested by past research in the area. Specifically, in the case of pension reform, we argue that people are willing to trade long-term, hypothetical benefits to avoid short-term, large, and tangible costs.<sup>4</sup>

Not all voters, however, should react similarly to misinformation that threatens one's self-interest. Past research has shown, for example, that the more cognitively inclined are less susceptible to fake news Pennycook and Rand (2019). We don't know, however, if this result holds when self-interest is at stake. One could argue that the more cognitively inclined are more likely to perceive threats to their self-interest because of their greater tendency

---

<sup>4</sup>Pension benefits are hypothetical because one can die before ever enjoying them and/or because other reforms can curtail them further.

to override their gut feeling reaction (from system 1) to engage in conscious thought and reflection (system 2) Arceneaux and Vander Wielen (2017); Frederick (2005). Their greater tendency to “deliberate” when presented with new information (including false information) allows them to better process the content of said information and integrate it into their judgment or decision-making. Such deliberation could lead participants to recognize that it is in their best interest to keep current benefits in lieu of preserving hypothetical, future benefits. Admittedly, they could also be more able to identify the misinformation for what it is and not react to it.

Another important factor is partisanship. A wealth of research has shown that partisanship plays an essential role in how voters define and engage with misinformation (Van der Linden et al., 2020; Osmundsen et al., 2021; Tong et al., 2020; Gawronski et al., 2023). In general, voters are more willing to embrace misinformation when it is congenial with their political preferences. But, what happens to partisans when the misinformation threatens their own self-interest? Do they still embrace it? We explore these possible heterogeneous treatment effects below.<sup>5</sup>

## The Brazilian social security reform and fake news

In early 2019, the Bolsonaro government proposed a large reform of the Brazilian social security system, which included an increase in the minimum age required for retirement, the reduction of stipends, and other measures considered widely unpopular. Specifically, half of the adult population was against the reform by July 2019, just six months before its

---

<sup>5</sup>In our initial pre-analysis plan, we argued that the more cognitively inclined and knowledgeable respondents whose interests are at stake would respond to the misinformation treatment by supporting more strongly the pension reform. We pre-registered three hypotheses to that effect (see H3-H5 in Section A of the Appendix). The argument was quite complex and presupposed that the more cognitively inclined and knowledgeable respondents would consider short and long-term trade-offs associated with pension benefits. We don’t have measures about the trade-offs, however, in our questionnaire. We thank reviewers on an earlier version of the paper for pointing out that limitation. We thus decided to deviate from the original pre-analysis plan and consider instead the heterogeneous effects of political knowledge and cognitive abilities as mere research questions just like we do for partisanship.

approval by the Brazilian Congress<sup>6</sup>. The proposal was intensely debated in the media and academic circles and most economists and policymakers agreed that some kind of reform had to be approved to guarantee the perennality of social security. The most popular TV News show, *Jornal Nacional*, broadcasted daily updates on the reform’s status in Congress, making social security reform a highly salient issue.

The Bolsonaro government defended the reform as a means to reduce the escalating government debt and increase investments in health and education. As the reform entered the Congressional agenda, members of the Bolsonaro government coalition started to spread false information on social media highlighting (supposedly) grim scenarios if social security failed to be reformed.<sup>7</sup> Some of these false and unofficial messages included threats to curtail or even eliminate the highly popular *Bolsa Família* program—a conditional cash transfer policy destined for poor families—as well as cuts in government resources to fund higher education, pay for civil servants’ salaries, and even substantial tax increases in numerous sectors of the economy. The strategy was clear: achieve popular support for social security reform by threatening the self-interest of targeted groups that benefit from current government policies (if the reform were to fail). The strategy aimed at encouraging different segments of the Brazilian population to support social security reform to avoid short-term, large, and tangible losses.

## Data and Methods

In May and June 2019, we conducted a large, pre-registered experimental study with Brazilian adults who use WhatsApp, Facebook Messenger, Instagram, or Twitter or a combination of them. The study was conducted at the height of the social security reform to assess whether and how misinformation that threatens self-interest affects voters’ attitudes toward

---

<sup>6</sup><https://economia.ig.com.br/2019-04-10/51-dos-brasileiros-sao-contr-reforma-da-previdencia-diz-datafolha.html>

<sup>7</sup>An investigation by the Federal Police (*Polícia Federal*) indicated that the Bolsonaro government had created a secret cabinet composed of commissioned members of the government to spread misinformation on social media. This secret cabinet was famously known as the ‘Gabinete do Ódio’ (The Cabinet of Hatred).

an important and salient state reform. We randomly assigned over 8,000 participants to one of seven groups: a control and six treatment groups. Our participants come from an online non-probability sample that follows quotas for age, gender, region, and social class, according to the Brazilian Census.<sup>8</sup> Control group participants were asked to answer a simple question about their support for the social security reform on a 5-point Likert-type scale from “strongly disagree (1)” to “strongly agree (5)” with “neither agree nor disagree (3)” as the middle response option. Participants in three of the six treatment groups were asked the same question but were provided, prior to answering, with one of three false messages that were circulating, in one form or another, on social media. The messages were false threats targeting specific groups. The threats referred to possible cuts to the *Bolsa Família* program, an increase in income tax for those earning 2,000 Brazilian reais or more monthly, and an increase in gasoline tax if the social security reform failed to be approved.<sup>9</sup> These threats are substantial and tangible since all three threats represent a clear drop in disposable income for recipients of the *Bolsa Família* program, those who pay income taxes, and those who spend money on gasoline. We label the three treatment groups as “Bolsa Família,” “Income Tax,” and “Gasoline Tax,” respectively. The three remaining treatment groups received the same messages but were also told that the threats were false *before* they stated their support for the reform. Since our focus is on misinformation effects and not corrected misinformation, these last three groups are not analyzed here. The total sample considered for analysis is thus 4,713 respondents. In section B of the Appendix, we provide the exact question wording for the control and treatment groups in both English and Portuguese. Section C of the Appendix presents, for its part, a balance analysis to show that our control and treatment groups share near identical characteristics and that the randomization procedure, therefore, was successful.

Since social media like Whatsapp and Facebook are known for being a means to spread-

---

<sup>8</sup>Data were collected by the online survey firm Netquest, the only firm in Brazil to possess an ISO 20252 quality certification for online panels at the time of data collection.

<sup>9</sup>In May 2019, 2,000 Brazilian reais were worth about 520 US dollars.



ing misinformation (Rossini and Kalogeropoulos, 2023), it is possible that some of our participants had *already* been exposed to these false messages, attenuating the effect of our treatment (Druckman and Leeper, 2012). By using “real-world” false messages we traded some of our ability to manipulate misinformation to gain, in turn, more realistic treatments. For that reason, we consider the effect sizes presented here as conservative estimates of the effects of threats to self-interest on support for social security reform in Brazil.

We measure self-interest by asking questions that identify which participants fit the targeted groups whose interests are at stake in the false messages. Specifically, we asked respondents to indicate if they are recipients of the *Bolsa Família* program (coded 1 if they are recipients and 0 otherwise), whether they earn 2,000 Brazilian reais or more monthly (coded 1 if they did and 0 otherwise), and own a car and/or a motorcycle (coded 1 if they own such a vehicle and 0 otherwise).<sup>10</sup> The self-interest measures are used to evaluate the following hypothesis, as stated in our pre-analysis plan (H1):

*False information increases support for pension reform among treatment respondents whose interests are most at stake should the pension reform fail (as primed by the false information presumably circulating on social media platforms), as compared to control group subjects who share the same interests but have not received the false information threatening their self-interest.*

We also asked respondents a series of questions tapping their political knowledge, inclination to engage in cognitive reflection (need for cognition–NFC), and a measure of analytical reasoning (cognitive reflective test–CRT) to assess the extent to which our treatment effects are moderated by these individual characteristics. Respondents were also asked questions about their political preferences to evaluate the extent to which partisans might also react differently to our experimental treatments, especially those more supportive of the Bolsonaro government. Since Brazil’s re-democratization in the 1980s, scholars have come to believe that Brazilian politics is centered around the Workers’ Party (*Partido dos Trabalhadores*–

---

<sup>10</sup>The three interest measures were asked at the very end of the questionnaire, several questions after the experimental treatment. Admittedly, these measures would have been preferably measured prior to the experimental manipulation. In section C of the Appendix, where we present the balance analysis, we show that the treatment did not affect the distribution of responses to these objective measures of interest.

*PT*) (Samuels and Zucco, 2018). Partisan politics in Brazil, therefore, can be thought of two main groups, those who support the PT (known as *petistas*) and those who oppose it (*antipetistas*). The anti-PT supporters divide themselves into several different parties, although most of them have revolved around Jair Bolsonaro since 2018 (Rennó, 2020). To evaluate possible heterogeneous treatment effects related to partisanship, we compare PT and anti-PT supporters, the latter group being favorable to the Bolsonaro government. Details about the measures used to evaluate for heterogeneous treatment effects are presented in section D of the Appendix.

## Results

Figure 1 displays the estimated support for the social security reform by experimental groups and the differences in support between the control and treatment groups, as estimates of the average treatment effects (ATE). Each estimate is presented with its 99% confidence interval. Support for the social security reform sits at 2.8, meaning that control group participants only slightly disagree with the reform. Support for the reform among participants from the three treatment groups is lower at 2.5, 2.4, and 2.3 for those in the “*Bolsa Família*,” “Income Tax,” and “Gasoline Tax” groups, respectively. The differences between the control and treatment groups are all statistically significant at .01 (two-tailed), as can be seen by the three misinformation ATE estimates presented at the far end of Figure 1. This first analysis suggests that support for the social security reform is *lower* when participants are presented with possible negative consequences to other existing public policies if social security fails to be adopted.

Of greater interest for present purposes, however, are the levels of support and differences in support between the control and treatment groups among those whose interests are threatened by a failure to reform social security. Let’s examine first the results for the *Bolsa Família* treatment. Figure 2 displays support for social security reform between *Bolsa*

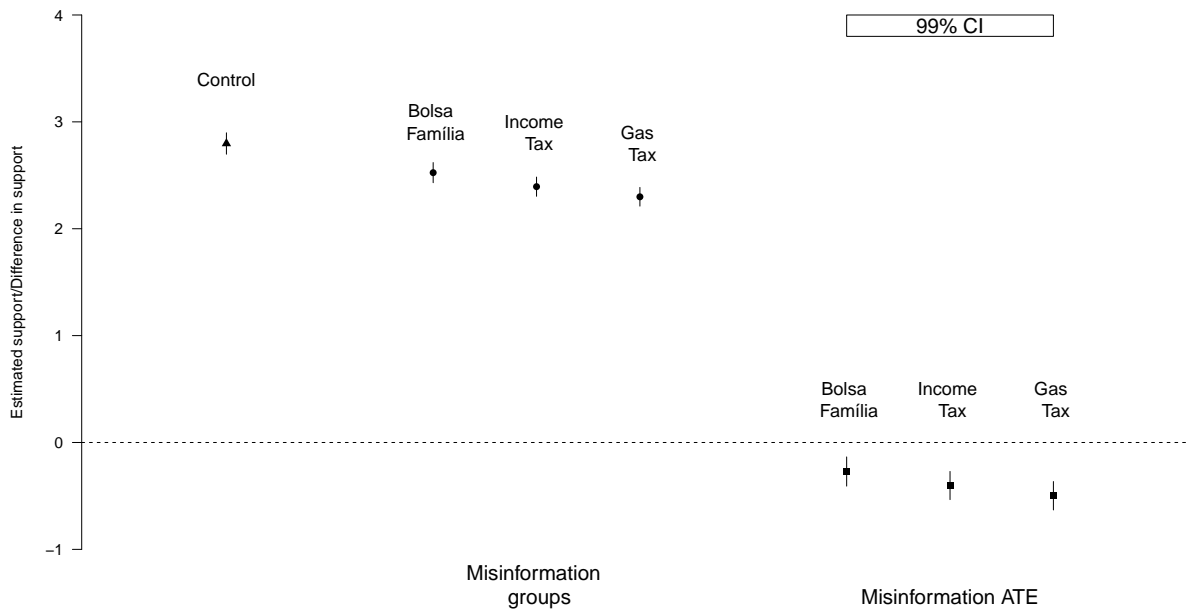


Figure 1: Estimated Support for Social Security Reform and Differences in Support between the Control and Treatment Groups

*Família* recipients and non-recipients for the control and treatment group participants and the difference in support between the two experimental groups by recipient status. We find that support among the control group non-recipients is higher than among *Bolsa Família* recipients. This result is consistent with public opinion about pension reform as higher-income people were generally more favorable to reforming the current system than those of lower income<sup>11</sup>. The third to last point estimate presented at the far end of Figure 2 (under Misinformation ATE, Recipient) is the value of interest here to evaluate our first hypothesis. We find, contrary to expectation, that the false information does *not* increase support for pension reform among treatment participants whose interests are most at stake should the pension reform fail, as compared to control group subjects who share the same interests but that have not received the false information threatening their self-interest. Instead, we find that the false threat “backfired,” by significantly decreasing support for the pension reform among those whose interests are at stake (at .01, two-tailed). Interestingly, we find that

<sup>11</sup><https://economia.ig.com.br/2019-04-10/51-dos-brasileiros-sao-contra-reforma-da-previdencia-diz-datafolha.html>

the false threat also reduces support for pension reform among the non-recipients (see the second to last point estimate). Finally, the last misinformation ATE point estimate shows that the difference between recipients and non-recipients is larger in the treatment group, as compared to the control group, although the difference is not statistically significant.

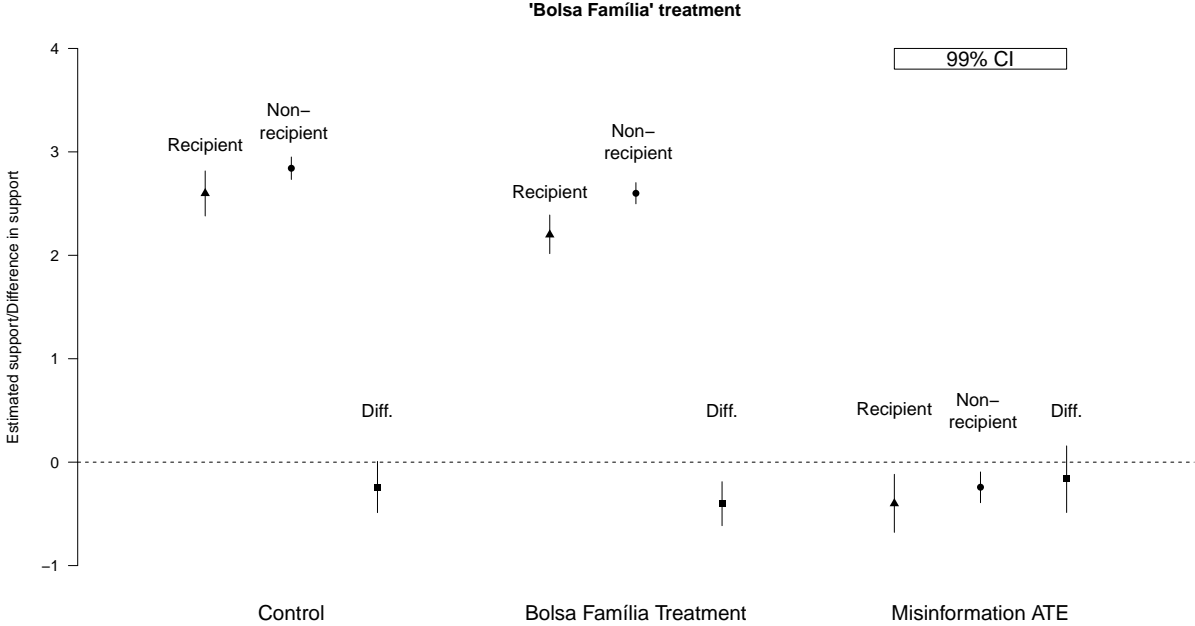


Figure 2: Estimated Support for Social Security Reform and Differences in Support between the Control and Treatment Groups Among *Bolsa Família* Recipients and Non-recipients

Let’s move next to the “Income Tax” treatment. The results are presented in Figure 3, comparing now participants who earn 2,000 reais or more monthly and those who earn less. The results are consistent with the ones presented for the *Bolsa Família* treatment above. First, we find that control group participants who earn 2,000 reais or more monthly are more supportive of the pension reform, in line with the public opinion literature about support for the reform among higher-income people as mentioned above. Again, the misinformation ATE estimates show that support for the pension reform is lower among treatment group subjects, as compared to control group subjects, independently of the participants’ income (see the third and second to last estimates in Figure 3). Once more, we find that the false information does not increase support for pension reform among treatment participants whose interests

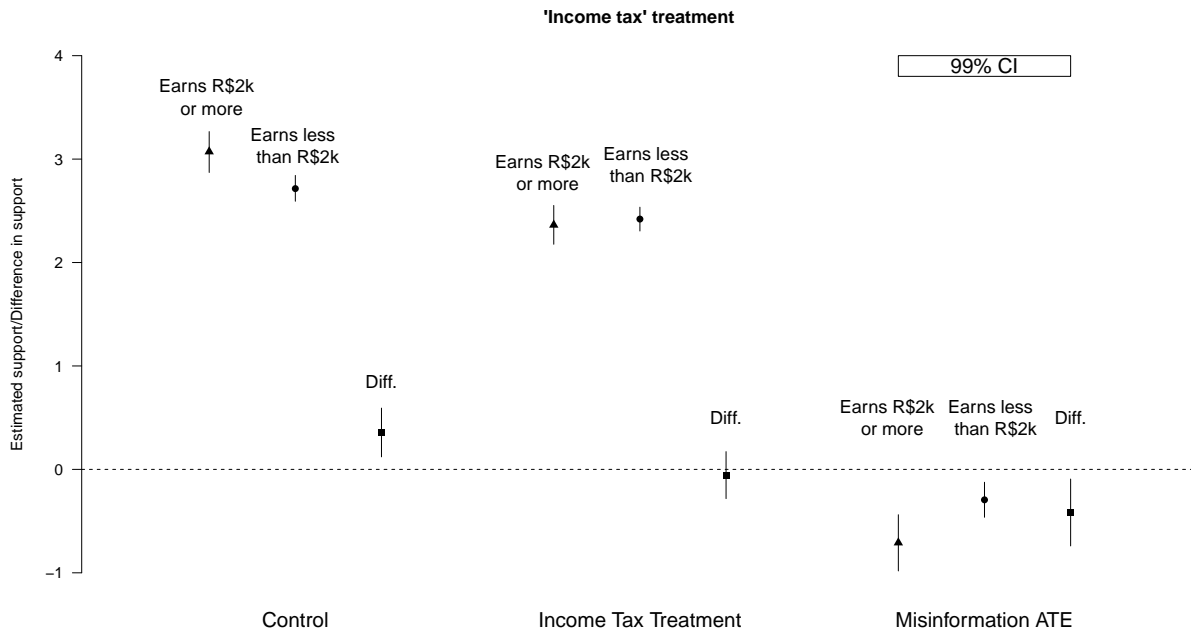


Figure 3: Estimated Support for Social Security Reform and Differences in Support between the Control and Treatment Groups Among Income Taxpayers and Non Taxpayers

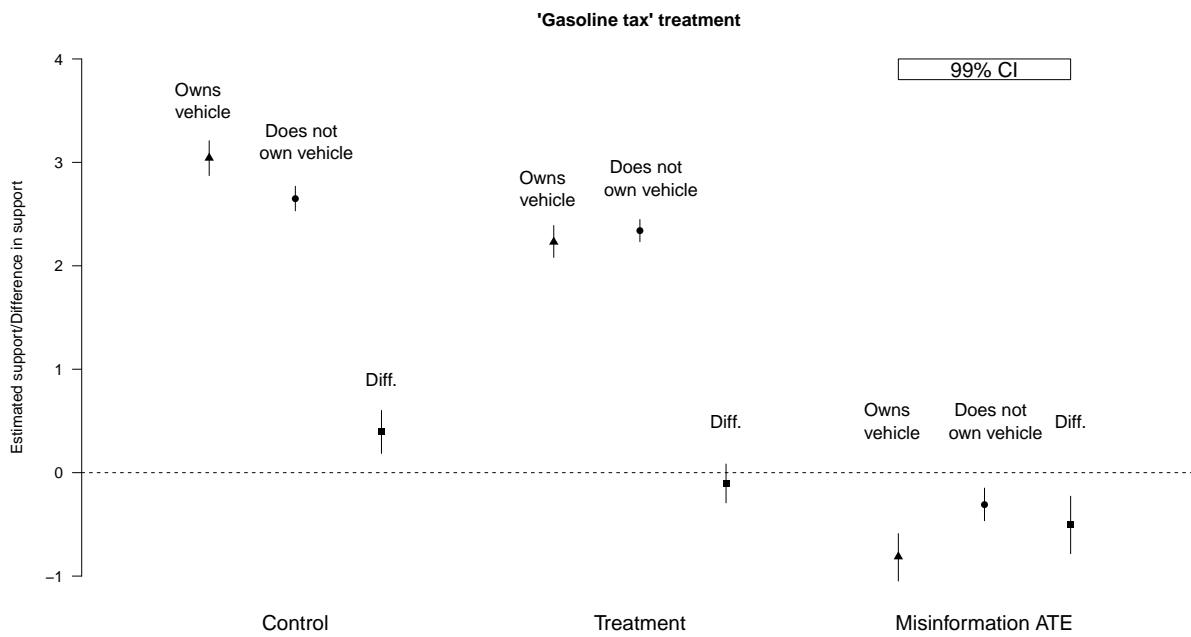


Figure 4: Estimated Support for Social Security Reform and Differences in Support between the Control and Treatment Groups Among Car/Motorcycle Owners and Non-owners

are most at stake should the pension reform fail, as compared to control group subjects who share the same interests but have not received the false information threatening their self-interest. To the contrary, we find again evidence for a “backfire” effect where those receiving the false threat (and whose interests are at stake) show *lower* support for pension reform. Finally, the difference between those who earn 2,000 reals or more monthly and those who do not is larger in the treatment group, when compared to the control group, and that difference is statistically significant.

Finally, Figure 4 presents the results for the “Gasoline Tax” treatment. The results from Figure 4 are consistent with the ones presented for the first two treatment groups. Specifically, control group participants who own a motor vehicle (car and/or motorcycle) are more supportive of the pension reform. Motor vehicle owners are presumably wealthier than those that do not own a vehicle and, not surprisingly, are also more supportive of the pension reform, on average. The misinformation ATE estimates show, once again, that support for the pension reform is lower among treatment group subjects, as compared to control group subjects, independently of the participants’ vehicle ownership status. The difference between those who own a vehicle and those who do not is larger in the treatment group, as compared to the control group, and that difference is, as in the “Income Tax” treatment, statistically significant.

Taken together, the results from Figures 2 to 4 do not indicate support for the hypothesis that false information increases support for pension reform among treatment participants whose interests are most at stake should the pension reform fail, as compared to control group subjects who share the same interests but have not received the false information threatening their self-interest. Instead, we find that false information systematically *decreases* support for pension reform among treatment participants whose interests are most at stake, suggesting that false threats can “backfire.” This finding is robust, given that it was evaluated by manipulating three different types of threats to self-interest.

The results from the heterogeneous treatment effects (HTE) analysis suggest no signif-

icant differences for political knowledge and cognitive ability (NFC and CRT). We find, however, that those more favorable to the Bolsonaro government—the anti-PT supporters—reacted more strongly to the experimental treatments, especially in the income and gasoline treatment groups. Precisely, anti-PT supporters whose interests are at stake, when compared to PT supporters, rejected more strongly the pension reform than those who share the same interests but who have not been exposed to the false information. The HTE results are presented in Section E of the Appendix.

## **Limitations**

Our study presents some limitations. First, the experimental design does not precisely reflect how misinformation is spread and consumed. The design mentioned a message that was circulating on WhatsApp and provided its content. A better design would use messages as they appear in the real-world as in Roozenbeek et al. (2022). Second, the current design could be improved by also attributing specific sources to the false messages. Recent work has shown that source credibility plays an important role on misinformation acceptance (Ecker et al., 2024). Despite these shortcomings, we believe that our study has made an important and innovative contribution to how misinformation and self-interest interact to affect public opinion.

## **Conclusion**

We looked at the effect of false threats to self-interest on support for government policies. We examined the 2019 Brazilian pension reform and adopted a vignette experiment applied to a large national sample of Brazilian adults that presented participants with false messages threatening the material interests of targeted groups. Specifically, we randomly assigned participants to receive false messages regarding the potential negative consequences of a failure to reform the pension system. The messages were threats to targeted groups' short-

term interests, including cuts to the *Bolsa Família* Program—a conditional cash transfer program—and increases in either income or gasoline taxes. We predicted that support for pension reform would be higher among those whose short-term interests are more at stake, given a failure to reform the national pension system. The reasoning was that people would be willing to support pension reform to avoid short-term, large, and tangible losses. Our results show that threatening messages tend to lower support for the reform, independently of whether one’s interests are at stake or not. Surprisingly, and contrary to expectations, we find that those whose interests were threatened by the false messages (*Bolsa Família* recipients, income taxpayers, and car/motorcycle owners) showed even *lower* support for pension reform. Our findings are consistent across all three targeted groups, suggesting that messages threatening people’s self-interest may exert opposite effects than those anticipated, that is, they can “backfire.”

Our findings carry some implications and raise new questions. First, threatening people with false messages when pursuing support for policies may backfire and lead instead to lower support. Thus misinformation campaigns like the one that took place in Brazil about pension reform may actually exert the opposite effect than the one intended. Such campaigns may not be very common but the kind of rhetoric it adopts is to be found in numerous electoral campaigns where candidates and parties “warn” voters about the possible consequences of electing some governments or candidates and not others. Indeed, fear is frequently used in electoral campaigns and, more particularly, among populist candidates (Nai, 2021).

Second, self-interest appears to moderate further the negative effect of threats. That is, those whose interests were most at stake displayed lower support for the reform when compared to those whose interests were not threatened. This finding is particularly interesting and also constitutes an important warning to those who devise such campaigns. Our current design, however, does not allow us to identify the mechanism, but it suggests that the intuitive idea that people might be willing to support an unpopular reform to avoid short-term losses does not hold. Is it because members of the targeted groups feel anger and/or become



upset and desire for the policy reform to fail? Or is it because they feel like it is unfair that their interests—and not that of others—are being threatened? Our unexpected results might also be best explained by reactance theory, a theory from psychology that suggests that people are less inclined to comply when threatened in order to maintain a sense of autonomy (Brehm and Brehm, 2013; Powers and Altman, 2022). These are plausible explanations that deserve further exploration.

Third, our findings are consistent with some of the recent work that questions the alarmist deleterious effects of misinformation on attitudes and behaviors (see, for example, Altay et al., 2023; Guess et al., 2020; Nyhan, 2020b). Some, for example, have shown that misinformation represents only a small fraction of what people consume in their information diet (e.g., Allen et al., 2020). Others, for their part, have shown that most people do not share misinformation (e.g., Guess et al., 2019). And, yet others, have demonstrated that most people are capable of discerning true from false news (e.g., Pennycook et al., 2021). Our findings indicate that even important disinformation campaigns like the one that occurred during the 2019 pension reform in Brazil failed to achieve its goal of increasing public support for said reform.

Finally, future research could also explore the differences between the effects of threats to self- vs group-interest in false messages spread on social media. Research in psychology suggests that group-interest, as compared to self-interest, may have a stronger effect on citizens' attitudes (Esses, 2021).

## References

- Achen, C. H. and Bartels, L. M. (2017). Democracy for realists. In *Democracy for Realists*. Princeton University Press.
- Allen, J., Howland, B., Mobius, M., Rothschild, D., and Watts, D. J. (2020). Evaluating the fake news problem at the scale of the information ecosystem. *Science advances*, 6(14):eaay3539.
- Altay, S., Berriche, M., and Acerbi, A. (2023). Misinformation on misinformation: Conceptual and methodological challenges. *Social media+ society*, 9(1):1–13.
- Arceneaux, K. and Vander Wielen, R. J. (2017). *Taming intuition: How reflection minimizes partisan reasoning and promotes democratic accountability*. Cambridge University Press.
- Bastick, Z. (2021). Would you notice if fake news changed your behavior? an experiment on the unconscious effects of disinformation. *Computers in human behavior*, 116:106633.
- Batista Pereira, F., Bueno, N. S., Nunes, F., and Pavão, N. (2022). Fake news, fact checking, and partisanship: the resilience of rumors in the 2018 brazilian elections. *The Journal of Politics*, 84(4):2188–2201.
- Batista Pereira, F., Bueno, N. S., Nunes, F., and Pavo, N. (2023). Inoculation reduces misinformation: Experimental evidence from multidimensional interventions in brazil. *Journal of Experimental Political Science*, page 1–12.
- Brehm, S. S. and Brehm, J. W. (2013). *Psychological reactance: A theory of freedom and control*. Academic Press.
- Campbell, A. L. (2002). Self-interest, social security, and the distinctive participation patterns of senior citizens. *American Political Science Review*, 96:565–574.
- Chong, D., Citrin, J., and Conley, P. (2001). When self-interest matters. *Political Psychology*, 22(3):541–570.
- de Benedictis-Kessner, J. and Hankinson, M. (2019). Concentrated burdens: How self-interest and partisanship shape opinion on opioid treatment policy. *American Political Science Review*, 113(4):1078–1084.

- Demel, S., Barr, A., Miller, L., and Ubeda, P. (2019). Commitment to political ideology is a luxury only students can afford: A distributive justice experiment. *Journal of Experimental Political Science*, 6(1):33–42.
- Druckman, J. N. and Leeper, T. J. (2012). Learning more from political communication experiments: Pretreatment and its effects. *American Journal of Political Science*, 56(4):875–896.
- Ecker, U. K., Prike, T., Paver, A. B., Scott, R. J., and Swire-Thompson, B. (2024). Don’t believe them! reducing misinformation influence through source discreditation. *Cognitive Research: Principles and Implications*, 9(1):52.
- Esses, V. M. (2021). Prejudice and discrimination toward immigrants. *Annual review of psychology*, 72:503–531.
- Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic perspectives*, 19(4):25–42.
- Gawronski, B., Ng, N. L., and Luke, D. M. (2023). Truth sensitivity and partisan bias in responses to misinformation. *Journal of Experimental Psychology: General*, 152(8):2205–2236.
- Guess, A., Nagler, J., and Tucker, J. (2019). Less than you think: Prevalence and predictors of fake news dissemination on facebook. *Science advances*, 5(1).
- Guess, A. M., Lockett, D., Lyons, B., Montgomery, J. M., Nyhan, B., and Reifler, J. (2020). “fake news” may have limited effects beyond increasing beliefs in false claims. *The Harvard Kennedy School Misinformation Review*, 1(1):1–12.
- Ha, L., Andreu Perez, L., and Ray, R. (2021). Mapping recent development in scholarship on fake news and misinformation, 2008 to 2017: Disciplinary contribution, topics, and impact. *American behavioral scientist*, 65(2):290–315.
- Haselswerdt, J. (2020). Carving out: Isolating the true effect of self-interest on policy attitudes. *American Political Science Review*, 114(4):1103–1116.

- Heinrich, T. and Witko, C. (2024). Self-interest and preferences for the regulation of artificial intelligence. *Journal of Information Technology & Politics*, pages 1–16.
- Jerit, J. and Zhao, Y. (2020). Political misinformation. *Annual Review of Political Science*, 23(1):77–94.
- Kinder, D. R. (1998). Opinion and action in the realm of politics. In Gilbert, D. T., Fiske, S., and Lindzey, G., editors, *The Handbook of Social Psychology*. McGraw-Hill, Boston: MA.
- Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., et al. (2018). The science of fake news. *Science*, 359(6380):1094–1096.
- Lupia, A. (1994). Shortcut versus encyclopedias: Information and voting behavior in california insurance reform elections. *American Political Science Review*, 88:63–76.
- Marble, W. and Nall, C. (2021). Where self-interest trumps ideology: liberal homeowners and local opposition to housing development. *The Journal of Politics*, 83(4):1747–1763.
- Maria Schaffer, L. and Spilker, G. (2019). Self-interest versus sociotropic considerations: an information-based perspective to understanding individuals’ trade preferences. *Review of International Political Economy*, 26(6):1266–1292.
- Nai, A. (2021). Fear and loathing in populist campaigns? comparing the communication style of populists and non-populists in elections worldwide. *Journal of Political Marketing*, 20(2):219–250.
- Nyhan, B. (2020a). Facts and myths about misperceptions. *Journal of Economic Perspectives*, 34(3):220–236.
- Nyhan, B. (2020b). Facts and myths about misperceptions. *Journal of Economic Perspectives*, 34(3):220–236.
- Nyhan, B. (2021). Why the backfire effect does not explain the durability of political misperceptions. *Proceedings of the National Academy of Sciences*, 118(15):e1912440117.
- Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., and Petersen, M. B. (2021).

- Partisan polarization is the primary psychological motivation behind political fake news sharing on twitter. *American Political Science Review*, 115(3):999–1015.
- Pennycook, G., Epstein, Z., Mosleh, M., Arechar, A. A., Eckles, D., and Rand, D. G. (2021). Shifting attention to accuracy can reduce misinformation online. *Nature*, 592(7855):590–595.
- Pennycook, G. and Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188:39–50.
- Powers, K. E. and Altman, D. (2022). The psychology of coercion failure: How reactance explains resistance to threats. *American Journal of Political Science*.
- Rennó, L. R. (2020). The bolsonaro voter: issue positions and vote choice in the 2018 brazilian presidential elections. *Latin American Politics and Society*, 62(4):1–23.
- Reny, T. T. and Sears, D. O. (2020). Symbolic politics and self-interest in post-affordable care act health insurance coverage. *Research & Politics*, 7(3):2053168020955108.
- Roozenbeek, J., Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L., Recchia, G., Van Der Bles, A. M., and Van Der Linden, S. (2020). Susceptibility to misinformation about covid-19 around the world. *Royal Society open science*, 7(10):201199.
- Roozenbeek, J., Traberg, C. S., and van der Linden, S. (2022). Technique-based inoculation against real-world misinformation. *Royal Society open science*, 9(5):211719.
- Rossini, P. and Kalogeropoulos, A. (2023). Don’t talk to strangers? the role of network composition, whatsapp groups, and partisanship in explaining beliefs in misinformation about covid-19 in brazil. *Journal of Information Technology & Politics*, pages 1–18.
- Samuels, D. J. and Zucco, C. (2018). *Partisans, antipartisans, and nonpartisans: Voting behavior in Brazil*. Cambridge University Press.
- Sears, D. O., Lau, R. R., Tyler, T. R., and Allen, H. M. (1980). Self-interest vs. symbolic politics in policy attitudes and presidential voting. *American Political Science Review*, 74(3):670–684.

- Thorson, E. (2016). Belief echoes: The persistent effects of corrected misinformation. *Political Communication*, 33(3):460–480.
- Tong, C., Gill, H., Li, J., Valenzuela, S., and Rojas, H. (2020). “fake news is anything they say!”—conceptualization and weaponization of fake news among the american public. *Mass Communication and Society*, 23(5):755–778.
- Van der Linden, S., Panagopoulos, C., and Roozenbeek, J. (2020). You are fake news: Political bias in perceptions of fake news. *Media, Culture & Society*, 42(3):460–470.
- van Huijstee, D., Vermeulen, I., Kerkhof, P., and Droog, E. (2022). Continued influence of misinformation in times of covid-19. *International Journal of Psychology*, 57(1):136–145.
- Wood, M. (2020). Who supports wealth redistribution? self-interest, symbolic politics and american exceptionalism approaches towards 1990 public opinion. *Global Tides*, 14(1):4.