

Partisan Cues and Perceived Risks: The effect of partisan social media frames during the Covid-19 crisis in Mexico

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Abstract

We present the results of a survey experiment designed to evaluate the effects of social media exposure on perceptions of personal health and job risks during the COVID-19 pandemic in Mexico. Our framing experiment treats respondents to positive and negative partisan messages from high-level politicians. Descriptive findings show divergent evaluations of how the government is addressing the crisis by supporters of the government and opposition parties. Results show that respondents are sensitive to negative frames regardless of the political color of the messenger. Further, supporters of the incumbent are more likely to deflect government's responsibility when treated with a negative frame by a politician from the opposition.

KEYWORDS

COVID-19, Framing Effects, Social Media, Partisanship.

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1 Introduction

Since the beginning of the COVID-19 crisis, researchers have documented significant partisan differences in perceived risk from the pandemic as well as wide partisan gaps in the voters' assessments of the government response (Gadarian et al., 2020; Green et al., 2020; Calvo and Ventura, 2021). Findings line up with a broad literature that connects risk perceptions to communication frames, from the well known prospective model of Tversky and Kahneman (1981) to the more recent partisan models of Iyengar (1990) and Iyengar et al. (2012). In this article, we deploy a novel experimental design to investigate how framing and partisan identities affects risk perceptions during the COVID-19 pandemic in Mexico.

We describe results from a pre-registered¹ survey experiment that models the effects of partisan frames on health and job risk and in the overall perceptions of the Mexican government response to the COVID-19 pandemic. Our goal is to test for the effect on partisan messages on perceived risk, manipulating social media messages from high level politicians aligned with the government and the opposition. These frames communicate negative and positive partisan messages in response to the crisis.

We implement the survey using an online probabilistic sample of Mexican voters. We prime respondents with information about the virus using edited tweets that changed the author and the content of the message. In the former manipulation, respondents are exposed to tweets from a like-minded, prominent political figure. For the content priming, respondents are exposed to either a positive tweet with the same wording from each politician, or a negative tweet from each politician blaming the other side for the pandemic crises.

The Mexican case offers an unique opportunity to investigate framing and partisan effects during the COVID-19 pandemic. The Mexican president, Andrés Manuel López Obrador, il-

¹Our pre-registration and pre-analysis plan are available here <https://osf.io/akru5/>

illustrates an example of erratic, negationist response to the pandemic, similar to the cases of Jair Bolsonaro in Brazil, and Donald Trump in the United States. The ambiguous stance of President Obrador reverberate among his supporters and opposition; while the latter developed a distinctive narrative against the belated government response and demanded quick action from the federal authorities (Beauregard and Camhaji, 2020), López Obrador’s copartisans had mixed reactions, from passionate public commitments with the presidential decisions (Padilla, 2020) to calls for a reconsideration of the federal government’s policy decisions (Damián, 2020; Navarro, 2020). Second, most of the recent studies on partisan responses to the COVID-19 pandemic have been conducted on developed countries and long-standing party systems (Gadarian et al., 2020), our study brings these studies to the Mexican case, a country living through a radical reconfiguration of its party system, and that offers a hard-test for the effects of partisan responses during the pandemic (Greene and Sánchez-Talanquer, 2018)

Our empirical results show large descriptive partisan differences in risk perception and limited effects of the experimental treatment. First, the evidence supports the expected effects of negative messages on respondents’ job and risk perceptions. The results are mostly driven by voters of the opposition parties and independents. In particular, this group feels more at risk after reading messages in which high-levels politicians blame their opponents for the consequences of the COVID-19 pandemic. We show weak results when separating the frames according to partisan cues from the authors of the social media message. Overall, our results validate the effect of negative frames on partisan responses to the crisis and show modest effects for partisan cues on voters’ risk perceptions during the pandemic.

2 Party cues and frames in the COVID-19 crisis

When facing complex social problems, voters need shortcuts to simplify and understand their surroundings. A long standing literature on political behavior and party heuristics—from the classic work by [Campbell et al. \(1960\)](#) to the most recent experimental work by [Kam \(2005\)](#), [Arceneaux \(2008\)](#), and [Nicholson \(2012\)](#)—has shown how voters rely on cues from party elites to process information, make decisions, define preferences, among other outcomes. At times, simple party labels and endorsements behind a given policy may be enough for voters to identify their own preferences and policy positions. However, as noted by [Entman \(1993, p. 5\)](#), partisan figures often take an additional step and select “some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described.” The partisan *framing* of a given social or political issue can, therefore, not only help voters take political stands, but also shape their interpretation and evaluation of a given problem.

The effect of partisan cues and corresponding frames, however, has its limits. The characteristics of the recipient, the messenger, and the issue at hand are particularly important elements to consider in such analysis. On the recipient side, political awareness ([Kam, 2005](#)) and partisan attachments ([Arceneaux, 2008](#)) deeply influence the sensitivity to a given message. Given the role of the recipient’s partisanship, the source of cues is equally relevant, as messages affect in-partisans and out-partisans differently ([Nicholson, 2012](#)). Such distinct partisan effect is more pronounced when issues are salient ([Arceneaux, 2008](#)) and divisive ([Berinsky, 2007](#)). It is important to note that, when dealing with science-based issues, such as the case of COVID-19, voters are also likely to use party cues from whichever side of the debate to make sense of their

own policy positions (Merkley and Stecula, 2018).

The framing used within a given partisan message is another important element in the analysis of the effects of party cues. Tversky and Kahneman's (1981)'s classic experiment on framing and risks demonstrates that economic decisions framed in terms of losses yield substantively different responses than those framed in terms of gains (Thaler et al., 1997). Moreover, the framing of a given issue or event can alter perceptions of risk by increasing the salience of particular elements or dimensions. Ultimately, such frames can further shape trust in political facts and scientific evidence (Nisbet et al., 2015; Bullock et al., 2013).

One of the most common channels to communicate specific partisan frames is through social media. In contrast to the conventional diffusion of messages by other media outlets, politicians have more control of the partisan messages they want to deliver, altering the frequencies of words, handles, and images (frame elements) that focus the attention of users on particular partisan traits (Aruguete and Calvo, 2018; Lin et al., 2014). In a rapidly changing and polarizing issue, as COVID-19 has resulted to be, along with the mobility restrictions it has imposed, social media has been a particularly useful for party leaders to share and frame their views on gains, losses, risks, and benefits that the pandemic has involved.

We combine these approaches to understand how partisan messages about the COVID-19 pandemic affect perceptions of health risk and job security in Mexico.

3 Experimental Design

Our experiment implements a four-arm treatment assignment in which each respondent is randomly exposed to one of four different tweets, with a variation on the content and the author of the message. Subsequently, the respondent answered a series of questions corresponding to our outcome variables. The experiment was included in a national online survey in Mexico,

fielded by Netquest-Vanderbilt with probabilistic samples draw by the LAPOP team.

3.1 Treatment Conditions

We edited tweets to prime respondents in our experiment. Although we reduce the external validity of the experiment by not using real tweets for our treatment conditions, we chose the wording of the tweets based on actual public statements and social media activity to maximize the validity of each treatment condition.²

We vary only two features of each tweet: author and tone. For the author, we use two prominent political figures: Martí Batres, current senator for the President’s ruling party, National Regeneration Movement (MORENA); and Felipe Calderón, Mexico’s president from 2006 to 2012 and one of the most vocal opposition figures against López Obrador (Trejo and Ley, 2020). We choose high-level politicians to ensure congruence or dissonance between the message and the respondents’ preferences.

To vary the tone of the message, we use a positive and a negative framing related to the COVID-19 crisis. In the positive framing, we use precisely the same wording for each author, in which the tweets mainly highlight the existence of a crisis and the importance of President López Obrador to lead the institutional efforts to fight the pandemic. For the negative tweets, we created one for each sender, mimicking their political preferences, thus maximizing external validity for the experiment. In these tweets, the author is blaming the opponent for not dealing well with the current crisis. We provide in the appendix evidence using behavioral responses to the tweets that respondents understood the tone and partisan dynamics of the messages.

²The experiment received the approval of the IRB of the University of Maryland, number 1552091-3. By the end of the survey, respondents were debriefed about the use of edited tweets.

3.2 Outcome Variables

We use three survey questions as our outcome variables. The first two capture the respondent’s perceptions of personal risk regarding health and job security during the COVID-19 pandemic. The third one measures the respondent’s evaluation of the government performance during the crisis. The complete wording for the questions is available in the Appendix.

Throughout the paper, we present the results across four groups. The first three identify those respondents who voted any of the three largest parties during the 2018 presidential election: MORENA, the National Action Party(PAN), and the Institutionalized Revolutionary Party (PRI). The last group includes those respondents who voted for independent candidates or did not vote in 2018.³ In the Appendix, we show our results are similar using different measures of partisanship.

4 Hypotheses

The first hypothesis of our experiment expects negative messages to increase perceptions of individual risk and decrease support for the government’s response to the pandemic. This expectation follows extant work in communication and political science, which show that voters increase their attention to issues that are negatively framed (Tversky and Kahneman, 1981; Iyengar, 1990; Arceneaux and Nickerson, 2010). For the case of the COVID-19 pandemic, negative frames should prime respondents about the extent of the health crisis and subsequent losses.

- *Hypothesis 1:* We predict that negative messages, compared with the positive tweets, will increase perceptions of risk and decrease support for the government’s response to the

³Each partisan group has respectively 699, 362, 192 respondents out of 2364 in our sample. All the other respondents were considered independents.

COVID-19 pandemic.

We also expect dissonance between the respondents' preferences and the author of the tweets to interact with the social media frames. In particular, we expect a positive message from an out-group politician to mitigate risk perceptions during the pandemic. These type of messages indicate that politicians are *crossing-the-aisle* and willing to collaborate with each other, thereby reducing cognitive dissonance by respondents. That is, we expect respondents exposed to positive messages from a 'misaligned' politician to report lower perceptions of risk, and a greater support for the government's response.

- *Hypothesis 2:* We predict that a positive message from a misaligned politician will decrease perceptions of risk, and increase support for the government response when compared to the message with same content from an in-group.

Third, we expect the opposite effect when when a 'misaligned' politician publishes negative messages. As shown in previous research (Banks et al., 2020), exposure to dissonant social media messages increases *contrast* (Merrill et al., 2003) and heightens perceived polarization. Therefore, we expect that, to the extent respondents observe a negative message from an out-group politician, the framing effects of going negative about the pandemic will be exacerbated (Adida et al., 2018). Therefore, supporters of the opposition will show higher risk perceptions and be more dissatisfied with the government. In contrast, the opposite effects are expected for López Obrador's copartisans. The corresponding hypotheses are as follows:

- *Hypothesis 3:* Out-group negative messages will increase framing effects compared with in-group negative tweets:
 - *H3a:* Respondents aligned with the opposition will feel more at risk and show greater negative views about the government when exposed to a negative misaligned message.

- *H3b*: Respondents aligned with the government will feel less at risk and show greater support for the government response to the crisis when exposed to a misaligned message.

5 Results

We first report descriptive results, with regression estimates for the dependent variables being explained by vote choice, with controls for gender, age, education, and occupation. Tables and raw percentages for each partisan group are available in Figure 6 in the Appendix.

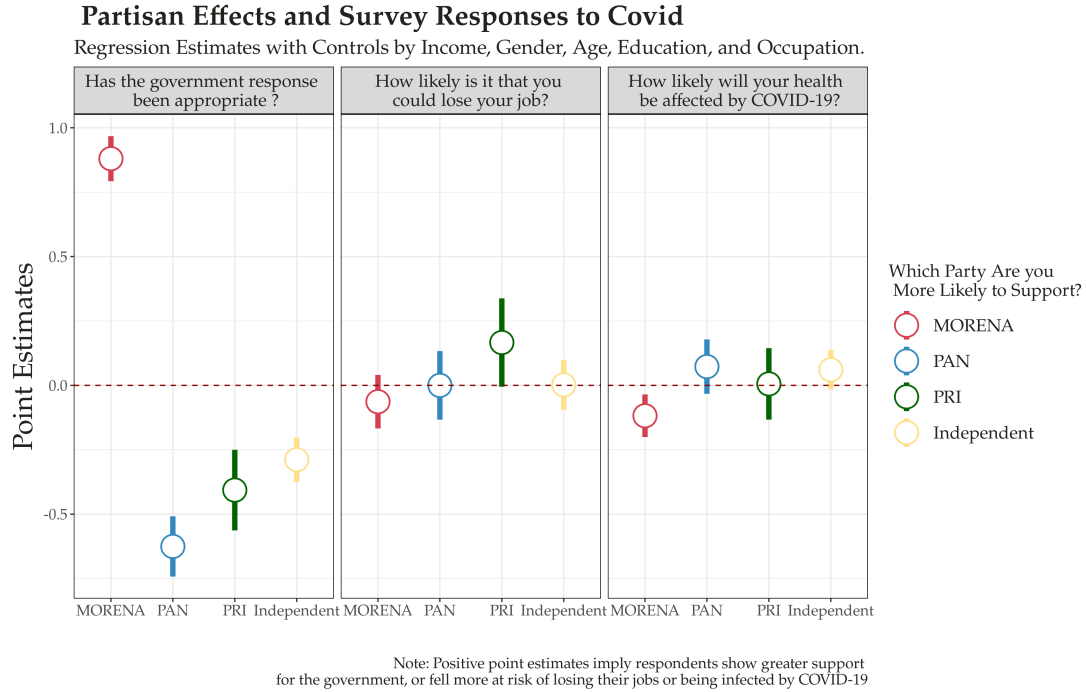
Figure 1 shows wide inter-party differences in perceived government performance. In particular, MORENA voters tend to evaluate the government in a more positive way than the other groups of voters. As Figure 6 in the Appendix shows, while almost half of MORENA voters evaluate the government response to the COVID-19 crisis as “very appropriate”, fewer than 15% of either PAN or PRI voters agree with such positive evaluation.

Partisan differences on risk perceptions are more subtle. Figure 6 in the Appendix shows that PAN voters’ probability to report that it is “very likely” or “somewhat likely” to lose their jobs is lower than what is observed for PRI or MORENA voters. But such difference disappears after controlling for other respondent characteristics. In contrast, MORENA voters seem to perceive fewer risks of both losing their jobs and being affected by COVID-19, after including our sociodemographic controls.

Below we present the results of our experiment using subgroup analysis. This approach allows us to capture the effect of the tweet on the relevant group of voters for each hypothesis. The coefficient point estimates and confidence intervals in the figures below present the Average Treatment Effect of the relevant sub-group ⁴. The results comparing all the treatment arms

⁴Considering that all our hypothesis were all pre-registered, including all the subgroup analysis, and most of our results are null, we do not adjust the standard errors by multiple comparisons

Figure 1. Regression Estimates for Partisan Effects on Risk Perceptions and Government Assessment during the Covid-19



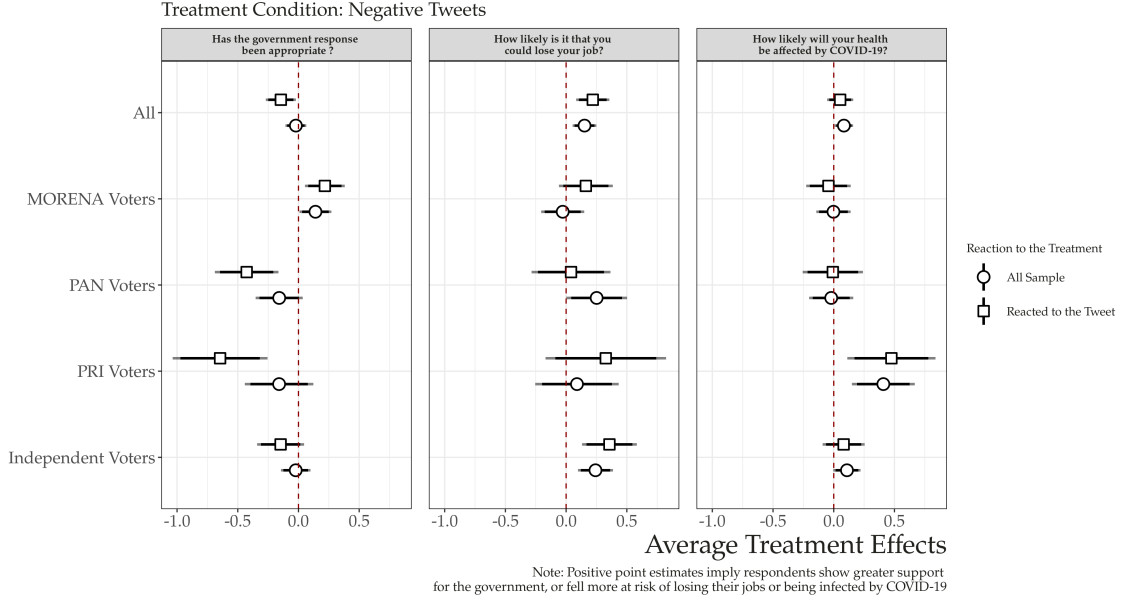
against each other are available in the Online Appendix.

Figure 2 shows evidence for our first hypothesis. When looking at all respondents, those exposed to a negative tweet express higher perceptions of job and health risk compared to those exposed to a positive tweet. There are, however, relevant differences across groups. The effect on the risk of losing one's job is mostly driven by independent voters. The members of this group are more likely to perceive themselves at risk of losing their jobs when they are exposed to a negative tweet than when exposed to a positive one.

PRI voters show the largest effects for the perceived consequences of COVID-19 for their personal health. In other words, compared to PRI voters who observed a positive tweet, PRI voters exposed to negative information are more likely to consider themselves at risk of developing health issues as a result of COVID-19. Since we expect that both independent and PRI voters have less emotional linkages with either Calderón and Batres, the results suggest the

weak overall effect of negative information to activate a partisan filter.

Figure 2. Treatment Effects for Negative Messages about the COVID-19 Pandemic.



Note: Estimates are based on the benchmark OLS model; we present point estimates with 95% and 90% confidence intervals. The baseline group is the respondents treated with a positive tweet.

Figure 2 also reveals that, among those individuals who reacted to the tweet,⁵ a negative message decreases their support for the government's response to the COVID-19 pandemic. The effect is observable for PAN and PRI voters as well as independent voters. The effect, however, is positive for those who voted for the incumbent party. As we discuss below, this variable shows large differences across groups of voters and the treatment seems to be unlikely to change such differences. Overall, we can conclude that negative information has important effects on risk perceptions over the general population, as predicted in H1.

The next two hypotheses have theoretical expectations based on framing effects and the content of a message from an out-group politician. We do so by matching respondents' reported vote choice with the author of the tweet, building a binary variable that indicates whether the

⁵After receiving the treatment, we ask respondents about their reaction to the tweet. We include in this analysis only respondents who answered they would retweet, liked, or replied to the treatment message.

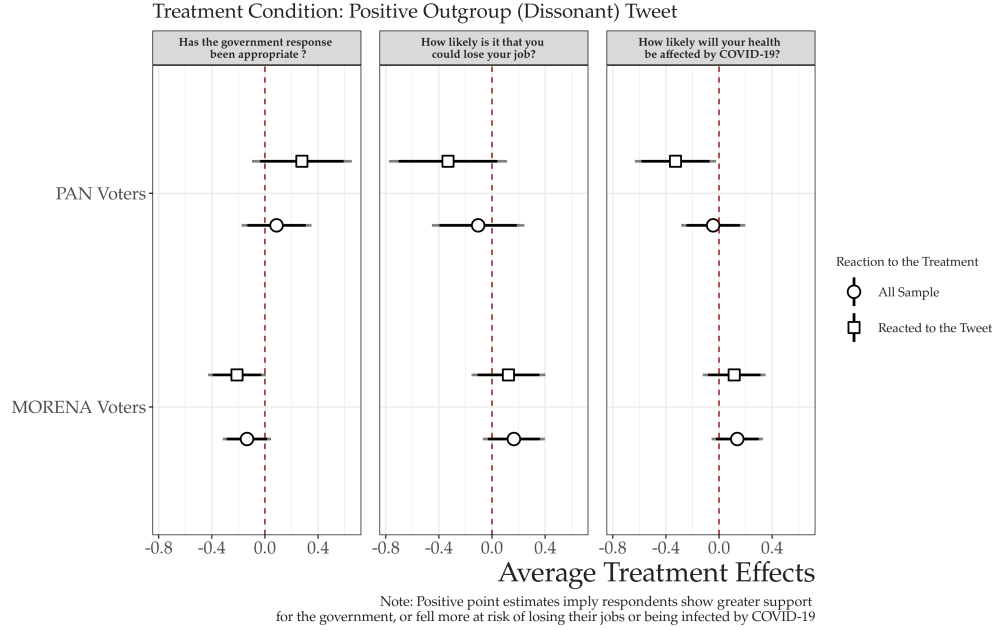
match comes from an in-group or an out-group character.

The second hypothesis expects that respondents who observe a positive tweet from a misaligned politician will report lower perceptions of risk and increased support for the government's response compared to those exposed to the same positive tweet but sent from an ingroup politician. As shown in Figure 3, the results fail to support this expectation. Given the partisan implications of this hypothesis, we focus the presentation of the results and discussion of the effects among those respondents more likely to be affected by the tweets of Calderón and Batres: PAN and MORENA voters. The point estimates among PAN voters suggest that those exposed to Batres' positive tweet have higher evaluations of the government and lower risk perceptions than those exposed to Calderón's positive tweet, as we theorized, but the results are not statistically significant. Surprisingly, the opposite is observed among MORENA voters. In comparison with those who observed the positive tweet from Batres, MORENA supporters exposed to Calderón's positive tweet show lower government support. A positive tweet from Calderón seems to increase the perceptions of risk among MORENA voters, yet the result is not statistically significant. In general, the results for this test suggest that positive tweets are not a powerful tool to activate partisan responses.

Figure 4 shows the results for Hypothesis 3, which expects heterogeneous effects for negative tweets across partisan groups. The results for PAN voters fail to support Hypothesis 3a. Against our expectation, PAN voters exposed to a negative tweet from Batres show no significant effect on government support or risk perceptions.

In the case of MORENA voters, a negative tweet from a misaligned politician seems to reduce their risk perceptions. In the entire sample, MORENA voters report lower job risk after reading a negative tweet from an out-group ($p.value < .10$). In addition, those MORENA respondents who reacted to the tweet have lower perceptions of health risks when exposed to Calderón's negative tweet than when exposed to Batres's negative tweet. This result supports our expectation for

Figure 3. Treatment Effects for Positive Messages from a Misaligned Politician

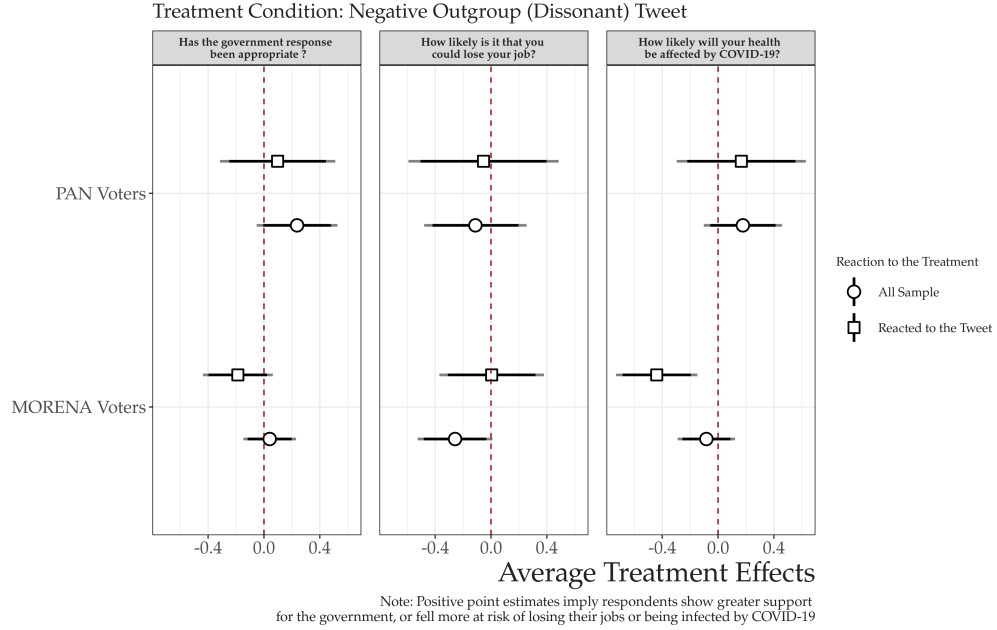


Note: Estimates are based on the benchmark OLS model; we present point estimates with 95% and 90% confidence intervals. The baseline group is the respondents treated with a positive message from an in-group political authority.

Hypothesis 3b, and it suggests that the effect produced by a negative tweet from an out-group politician is stronger than a negative tweet from a likely-minded politician.

In sum, the results illustrate the effects of negative information on the risk perceptions. Exposure to negative tweets seem to increase respondents' perceptions of losing their job and being affected by COVID-19 on the entire sample. Nevertheless, voters of the incumbent party seem to report lower risk perceptions, by answering in a partisan fashion when the negative information comes from a misaligned politician attacking the government.

Figure 4. Treatment Effects for Negative Messages from a Misaligned Politician



Note: Estimates are based on the benchmark OLS model; we present point estimates with 95% and 90% confidence intervals. The baseline group is the respondents treated with a negative message from an ingroup political authority.

6 Discussion

The mixed nature of some of our results deserves further discussion. It is important to highlight that the evidence of our first hypothesis adds support to the extensive literature on framing effects, with a particular emphasis on the role that negative messages play in expanding perceived risks. On the other hand, we did not find supporting evidence for H2, and H3 was only partially supported.

We examine three potential explanations for the null findings on H2. The first one is the possibility that respondents might have failed to interpret the partisan content of our frames. To test for this, we take advantage of our validity checks in our survey. However, as Section H in the SIF file shows, MORENA voters more actively retweeted Martí Bartres, while PAN voters

retweeted Felipe Calderón. In short, respondents properly interpreted the partisan content of the frames.

A second possibility is that our experimental frames did not elicit the expected emotional response to the tone and author of the tweets. But, once again, the results in Section H show that our experimental frames activated the expected mediation mechanisms (*anger*, *disgust*, *hope*). In particular, angry voters increased their perceived risk while hopeful voters lower it down. These results mitigate potential concerns about respondents' misinterpretation and a potential emotional disconnect with the frames.

The third possibility is that partisan groups in Mexico are not strong enough to activate in-group or out-group identities among respondents. The findings from Table 4 show that the partisan responses were inconsistent across our four treatments, moderating the overall effect of the frames. These results suggest that our findings are not the product of a weak experimental design but rather the limited effect of the frames across partisan groups in Mexico.

These limited effects among partisan groups are likely to be the result of the ongoing reshaping of the Mexican party system. The recent rise of MORENA forced opposition parties to rethink its identity. For the particular case of the PAN, the 2018 presidential campaign was a period of major internal divisions after a complicated nomination, the resignation of Calderón as party member, and the subsequent electoral defeat (Greene and Sánchez-Talanquer, 2018). Furthermore, the identification with MORENA as a party brand is recent and still evolving. About two thirds of voters who identify with MORENA accept feeling closer to López Obrador than the to the party.⁶

Taken together, the heterogeneous responses to the frames across these partisan groups can be explained by the lack of cohesion among PAN and MORENA voters. While negative frames

⁶Moreno, Alejandro. "De minorías y megáfonos." *El Financiero*. February 26, 2021. <https://www.elfinanciero.com.mx/opinion/alejandro-moreno/de-minorias-y-megafonos>

do polarize Mexican voters and make them feel more exposed to the health and job risks, our results indicate that partisan source cues have a moderate effect on risk updating. As a result, partisan realignment is likely to reduce the role of source cues and consequently weaken partisan reactions.

7 Conclusion

A common assumption regarding how information affects citizens' attitudes is that it is conditional on who delivers and receives the message. This report revisits the assumption studying the effects of information in the ongoing COVID-19 crisis in Mexico. The results show that negative framing matters. Tweets with negative content increase perceptions of risk, regardless of who delivers the message. Our analysis of the Mexican case amid a radical reconfiguration of the party system has revealed interesting partisan reactions to the politicians' messages.

Opposition voters are still recovering from their poor results during the 2018 election, along with the lack of a clear opposition leader. Together, these elements make Mexican voters more receptive to the messages coming from both sides of the aisle. In contrast, MORENA voters are more able to react to negative messages coming from the opposition. As the results show, their risk perceptions decrease after reading a criticism against the government by former President Felipe Calderón. This outcome illustrates the ongoing polarization in the country and the resistance from government supporters to even listen alternative policies to face the crisis outside from those proposed by the government.

We have brought to light new evidence about the role of positive and negative framing in political messages during a pandemic. This should not be, of course, the last word. We invite scholars interested on the topic to complement our findings by measuring the strength of MORENA voters' cognitive dissonance. In particular, further research should explore the

attitudinal changes of this group after seeing a negative message towards the government from an in-group member. Such comparison would help us clarify whether supporters of the current government care more about the message or the messenger.

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Partisan Cues and Perceived Health Risks: The effect of partisan social media frames during the Covid-19 crisis in Mexico

Supporting Information Files (SIF)

Section A: Sociodemographics across the samples

In this section, we present individual level sociodemographic information aggregated across the four treatment conditions. As the reader can assess, there are no significant differences across the treatment groups in our sample. Since most of these variables are nominal, the values do not have a direct interpretation.

Table 1. Demographics Across the Treatment Arms

table Positive Calderon	Variable	Quantity	Negative Bartes	Negative Calderon	Positive Bartes
Age	Mean	2.92	3.03	2.87	2.89
	Standard Error	3.15	3.18	3.23	3.31
Education	Mean	1.29	1.30	1.29	1.34
	Standard Error	1.49	1.50	1.46	1.49
Gender	Mean	5.17	5.22	5.18	5.16
	Standard Error	0.70	0.71	0.69	0.75
Ideological Placement	Mean	5.39	5.38	5.46	5.34
	Standard Error	0.91	0.99	1.02	1.00
Occupation	Mean	5.10	5.27	5.15	5.61
	Standard Error	0.50	0.49	0.48	0.49
Income Assistance	Mean	1.54	1.50	1.55	1.52
	Standard Error	1.87	1.93	1.87	1.91
Relative Income	Mean	1.57	1.59	1.63	1.58
	Standard Error	0.50	0.50	0.50	0.50
Total Cases	Total Number of Cases	577	565	624	580

Section B: Outcome Variables

We use three main questions as our outcome variables. The complete wording is presented below. These questions capture perceptions about personal risk during the COVID-19 pandemic and the respondents' opinions about the government's performance during the crises. All our statistical models uses a numeric coding for the three variables.

- **Question 1:** How likely is that your health would be affected by the COVID-19? (very likely, somewhat likely, somewhat unlikely, very unlikely)
- **Question 2:** Given the current health and economic crisis produced by the Coronavirus, how likely is it that you could lose your job? (very likely, somewhat likely, somewhat unlikely, very unlikely)
- **Question 3:** Has the government response been appropriate when faced with the corona COVID-19? (Very appropriate, somewhat appropriate, somewhat unappropriated, very inappropriate).

Section C: Descriptive Results on Risk Assessment and Partisanship

In this appendix, we take a closer look at the descriptive evidence regarding partisan responses from voters to COVID-19 in Mexico. 1. Figure presents differences in perceived risks by supporters of the three partisan groups we analyze in our paper: voters of MORENA, PAN and PRI.

As discussed in the paper, Figure 1 reports markedly inter-party differences in perceived government performance between each partisan group. Partisan differences on risk perceptions are more nuanced, but as our regression estimates show in Figure 1 and Table 2, MORENA voters are perceive fewer risks of both losing their jobs and being affected by COVID-19 in particular when compared to independents, after including our socio-demographic controls.

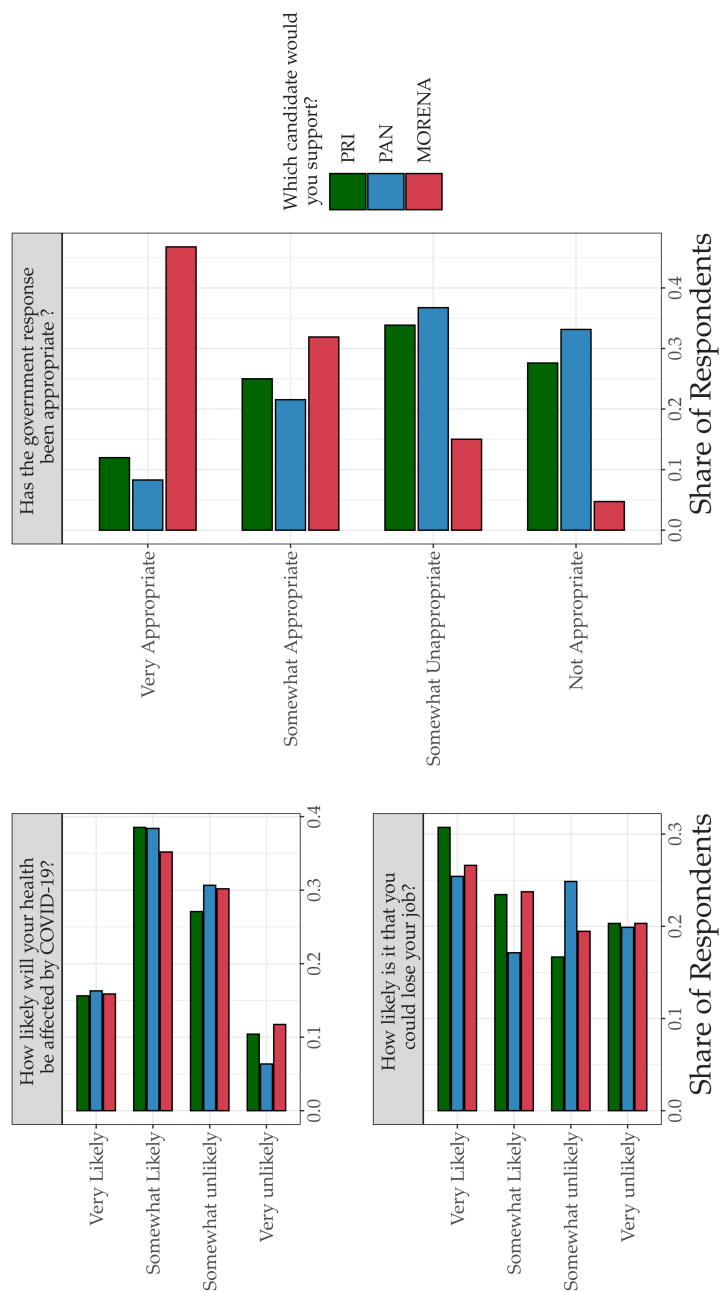


Figure 1. Survey assessments of the quality of the Government response, perceptions of personal health risk, and perceptions of personal job security in Mexico, March 23 through May 4, 2020.

We also provide the numerical results for the models summarized on Figure 1 in the paper. We use simple linear models to understand the association between vote choice and partisanship with risk assessment and government support during the pandemic. In the main paper, we report only the parameters of interest, excluding the analyzes of the covariates. We present the full numerical results in Table 2. The model uses the category of independent voters as the reference group.

Table 2. Regression models of perception of risk and government assessments with full controls

	<i>Dependent variable:</i>					
	Job Risk	Health Risk	Government Assessment	Job Risk	Health Risk	Government Assessment
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	4.582*** (0.162)	3.229*** (0.137)	2.814*** (0.130)	4.565*** (0.162)	3.254*** (0.137)	2.864*** (0.133)
Voters MORENA	-0.094 (0.062)	-0.167*** (0.053)	0.717*** (0.050)			
Voters PRI	0.033 (0.100)	-0.062 (0.085)	-0.294*** (0.080)			
Voters PAN	-0.0004 (0.078)	-0.004 (0.066)	-0.456*** (0.063)			
Partisans MORENA				-0.068 (0.065)	-0.229*** (0.055)	0.753*** (0.053)
Partisans PRI				0.157 (0.117)	-0.115 (0.099)	-0.287*** (0.096)
Partisans PAN				0.037 (0.092)	-0.121 (0.078)	-0.381*** (0.075)
Income	-0.096*** (0.014)	-0.050*** (0.012)	-0.014 (0.012)	-0.096*** (0.014)	-0.048*** (0.012)	-0.017 (0.012)
Gender:Male	0.101* (0.054)	0.082* (0.046)	0.022 (0.043)	0.103* (0.054)	0.080* (0.045)	0.012 (0.044)
Employed	-0.334*** (0.055)	0.008 (0.047)	0.070 (0.044)	-0.336*** (0.055)	0.009 (0.047)	0.073 (0.045)
Education	-0.153*** (0.028)	-0.024 (0.024)	-0.058*** (0.022)	-0.153*** (0.028)	-0.030 (0.024)	-0.057** (0.023)
Age	-0.094*** (0.018)	-0.002 (0.015)	0.010 (0.014)	-0.095*** (0.018)	0.001 (0.015)	-0.002 (0.015)
Observations	2,271	2,270	2,274	2,271	2,270	2,274
Adjusted R ²	0.080	0.013	0.154	0.080	0.016	0.116

Note:

*p<0.1; **p<0.05; ***p<0.01

Section D: Experimental Instruments

Table 3 presents the full wording of the treatment conditions. Figure 2 presents the treatments as the respondents read it in our framing experiment.

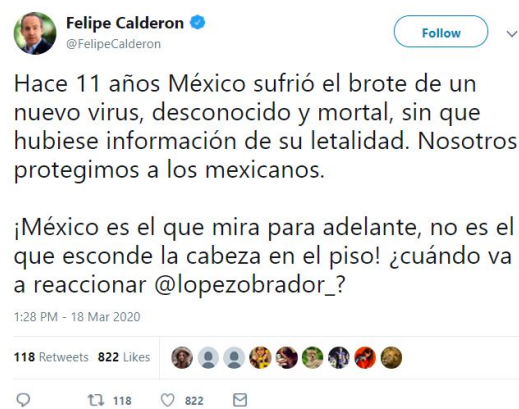
Table 3. Treatment Conditions

	Positive Tweet	Negative Tweet
Felipe Calderón	When confronting the crisis of the coronavirus, we must protect the elderly so that they can stop working today, while still ensuring their labor rights. All my support to @lopezobrador_ in his fight against the coronavirus.	Eleven years ago Mexico suffered with the emergence of a new virus, unknown and deadly, without any information about its letality. We protected Mexico's citizens. Mexico is the one that looks forward, not the one that hides its head under the ground! When will @lopezobrador_ react?
Marti Batres	When confronting the crisis of the coronavirus, we must protect the elderly so that they can stop working today, while still ensuring their labor rights. All my support to @lopezobrador_ in his fight against the coronavirus.	Eleven years ago Mexico suffered with the emergence of a new virus, unknown and deadly, without any information about its letality. @FelipeCalderon did not protect Mexico's citizens. Mexico is the one that looks forward, not the one that hides its head under the ground! That is why I support @Lopezobrador_

Figure 2. Tweets for the Treatment Conditions



a) Felipe Calderón x Positive Tweet (T1)



b) Felipe Calderón x Negative Tweet (T2)



a) Marti Batres x Positive Tweet (T3)



b) Marti Batres x Negative Tweet (T4)

Section D: Validity of the Instruments

In this section, we provide evidence that the respondents understood well the tone of each treatment condition, and the alignment with each of the high-level politician used in the experiment. To evaluate the validity of partisan perceptions to each of the treatments, we asked respondents to indicate whether they would “like”, “retweet”, “reply”, or “ignore” the Tweet they just saw. Descriptive information is revealing and worth exploring in some detail.

First, as expected, respondents decision to “like” or “retweet” follow clear partisan lines, with voters supporting the government considerably more likely to retweet both the negative and positive messages by Batres. Similarly, supporters of the opposition parties PRI and PAN were more likely to share messages by Calderón.

Second, more interestingly, results show strong inclinations by MORENA voters to “like” and “retweet” positive partisan messages. This group of voters shared the negative and positive posts by Batres 41% and 65% of the time, respectively. In contrast, positive and negative messages of Calderón were retweeted at almost identical rates, both by supporters of PAN, the party that endorsed Calderón’s candidacy for the presidency, as well as by the PRI supporters.

Finally, the results reveal that Calderón’s positive tweet collected significant retweets and favs from MORENA voters. Overall, the sharing behavior of survey respondents shows that the different treatments were properly interpreted and triggered the expected responses.

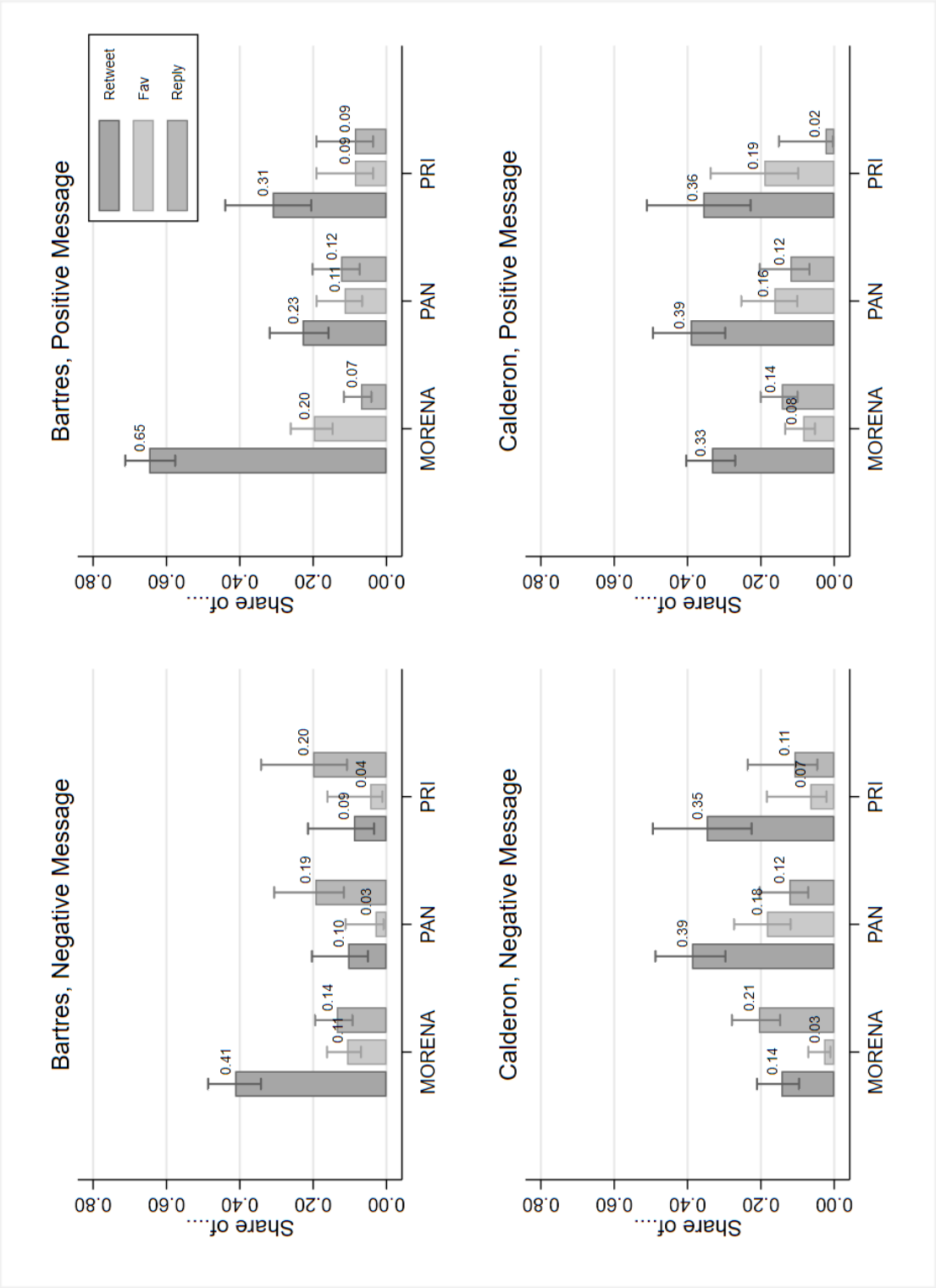


Figure 3. Favs, Retweets, Replies in response to each of the four treatments.

Section E: Treatment effects for all the instruments

Our experimental design exposes each respondent to one of the four arms of our treatment condition. Therefore, we did not have a classic control group composed by respondents not exposed to any type of intervention. As a result, our pre-registered hypotheses and empirical results measures differences between the treatment conditions according to our theoretical reasoning.

In this section, we provide results using all the possible comparisons between the four treatment arms and the three partisans groups we analyze in the paper. The results are estimated by regressing the outcomes variables in each condition using linear model without a intercept. Therefore, our estimates provide information about changes, from the mean, related to each treatment condition. Figures 4 presents the results, with the corresponding p-values for each comparison reported on 5

Figure 4. Framing and Partisan Estimates by Vote Choice for all the Treatment-arms

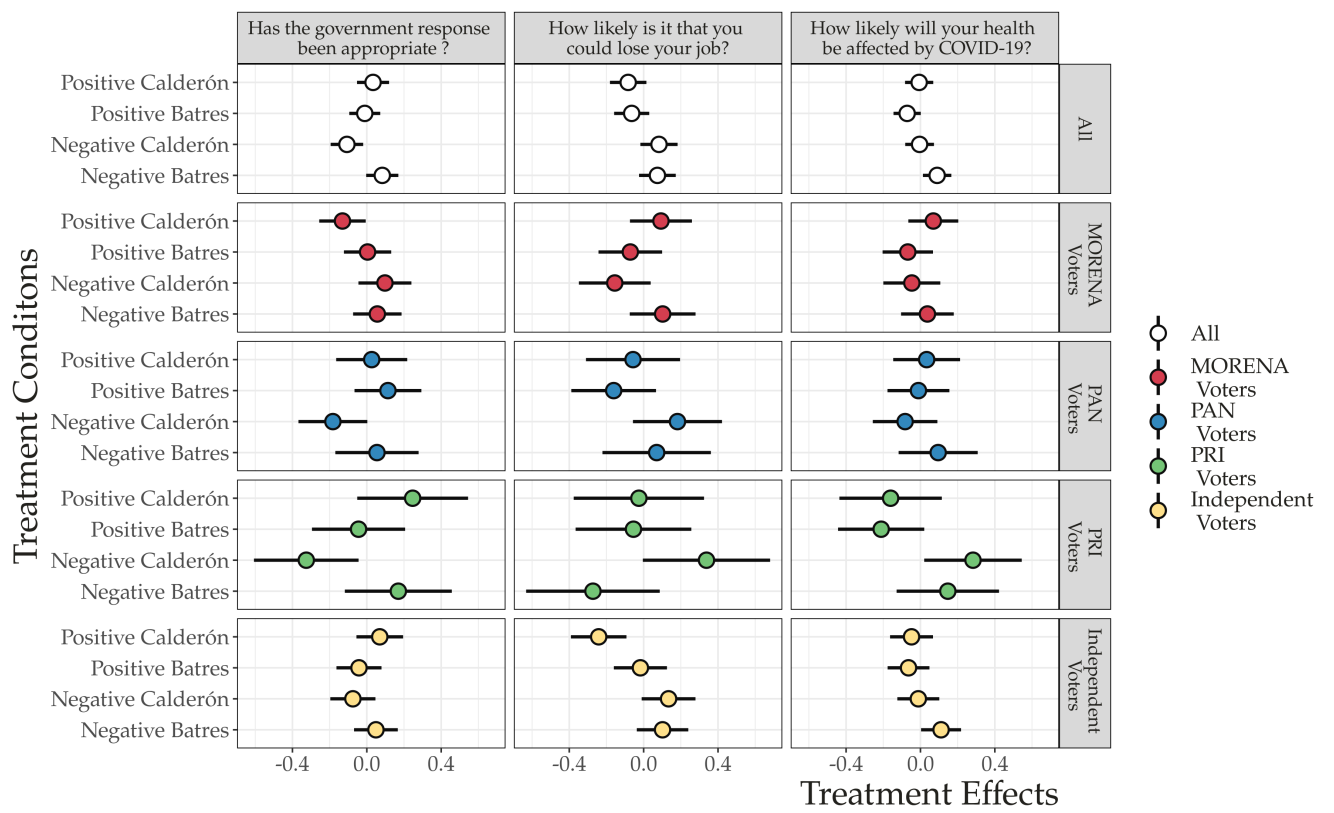


Figure 5. P-values for the Estimates by Vote Choice for all the Treatment-arms

P-values for the Treatment Comparisons									
Government Support			Job Risks			Health Risks			
Negative Calderón	0.002		0.907			0.089			All
Positive Batres	0.124	0.119	0.047	0.037		0.003	0.218		
Positive Calderón	0.426	0.025	0.027	0.021	0.786	0.078	0.966	0.23	
Negative Calderón	0.678		0.054			0.432			Morena Voters
Positive Batres	0.572	0.338	0.167	0.525		0.292	0.835		
Positive Calderón	0.042	0.018	0.941	0.057	0.177	0.751	0.267	0.159	
Negative Calderón	0.111		0.562			0.205			PAN Voters
Positive Batres	0.687	0.025	0.222	0.043		0.442	0.56		
Positive Calderón	0.85	0.125	0.519	0.18	0.55	0.663	0.364	0.724	
Negative Calderón	0.017		0.017			0.486			PRI Voters
Positive Batres	0.273	0.145	0.37	0.098		0.053	0.006		
Positive Calderón	0.716	0.007	0.336	0.148	0.903	0.123	0.024	0.782	
Negative Calderón	0.151		0.751			0.124			Independent Voters
Positive Batres	0.29	0.708	0.241	0.145		0.028	0.517		
Positive Calderón	0.814	0.105	0.001	0	0.034	0.049	0.658	0.844	
	Negative Batres	Negative Calderón	Positive Batres	Negative Batres	Negative Calderón	Positive Batres	Negative Batres	Negative Calderón	Positive Batres

P-value

- p-value < 0.05
- p-value < 0.10
- p-value > 0.10

Section F: Average Treatment effects by Partisanship

The results reported in the paper uses vote choice – which party the voter is likely to vote if elections were to be held in the next week – to perform our subgroup analysis. As we anticipated in the Pre-Analysis Plan, we also report the results using measures for partisanship. As noted in our Discussion section in the main text, we opted to operationalize partisanship through vote choice given the ongoing realignment of the Mexican party system and the still evolving nature of partisan attachments to MORENA, a relatively new party in Mexican politics.

For partisanship, we asked our respondents to answer which party they liked the most. Respectively, 529, 222, and 130 reported to like the most our three parties of interest, MORENA, PAN, and PRI. All the other preferences were summed up for the group of Independents. Although our sample size reduces considerably using partisanship instead of vote choice, results go in the same direction, but are smaller in size, as the ones reported in the paper. In particular, the reader can notice how the results for Independents, the majority of the sample, converge for the average treatment effect for Hypothesis 1.

Figure 6. Average Treatment Effects for Negative Framing

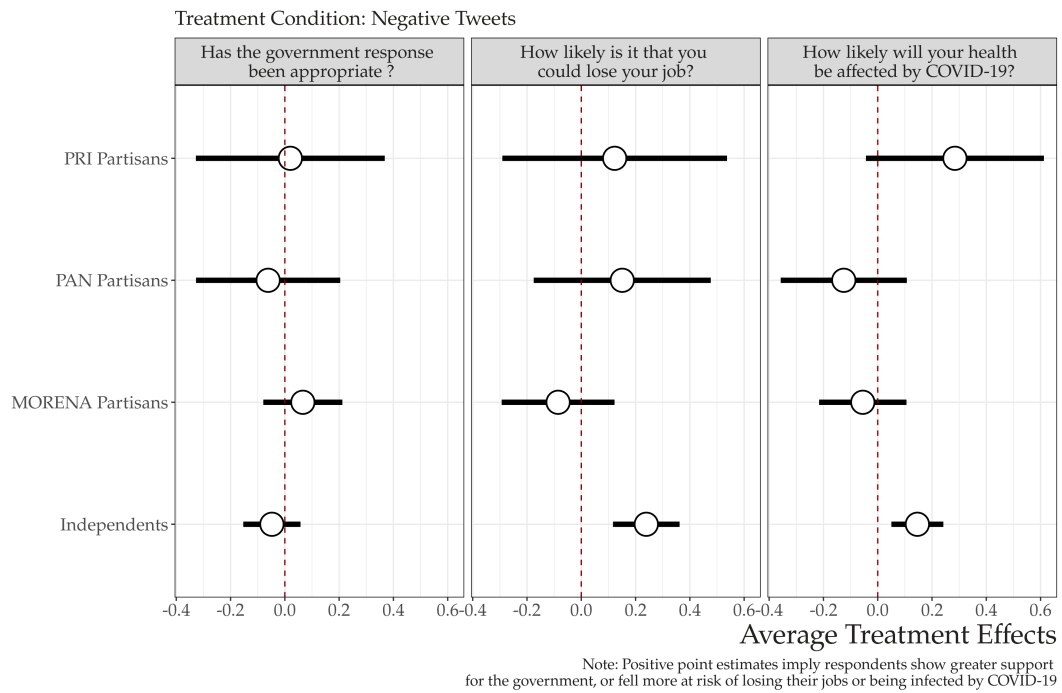


Figure 7. Average Treatment Effect for Cognitive Dissonance with Positive Framing

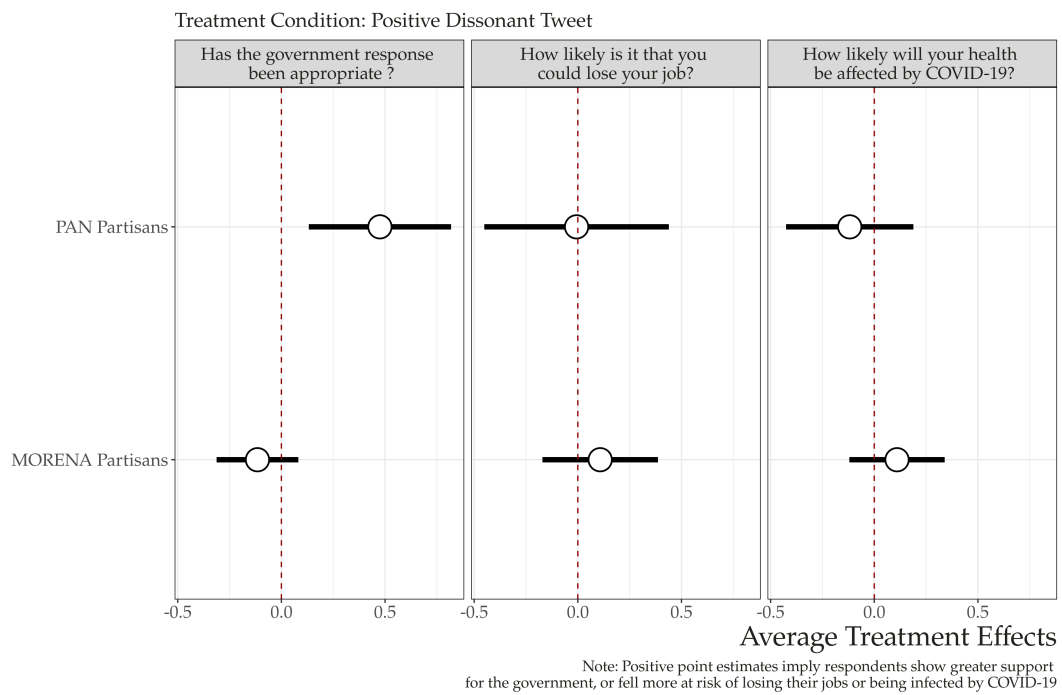
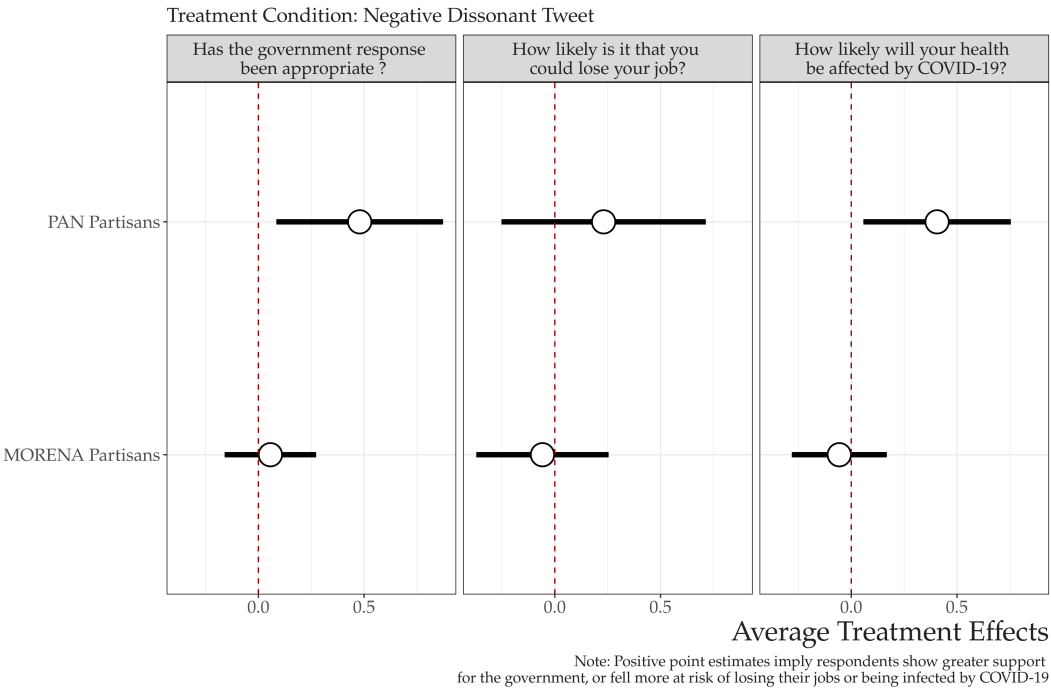


Figure 8. Average Treatment Effect for Cognitive Dissonance with Negative Framing



Section H: Partisan heterogeneity in reacting to frames

The experimental results did not support H2 and they provide only partial support for H3. However, there is clear support for the effect of an emotional response to the frames and perceptions of health and job risks. In this section we use some of the validation checks in the experiment to explore why H2 and H3 were not fully supported.

Null findings on H2 could be explained by three different mechanisms that connect exposure to frames and risk perceptions: First, respondents could have failed to interpret the partisan content of the four different frames. In that case, weak findings would be explained by the failure of the frame/signal to which respondents had to react. We may test for this potential problem because we included a validation check in the experiment, asking respondents if they would “like”, “retweet”, “reply”, or ignore the tweet. Therefore, we can observe whether partisans’ behavior aligns with the content of the frames. Section D in this SIF file showed conclusively that respondents in México properly interpreted the partisan content of the frames and shared them as expected.

Second, findings may be weak because frames did not elicit the expected emotional response to the negative or positive tweets posted by the in-group or out-group politician. Following [Banks et al. \(2019\)](#), we expect the mediation mechanisms (“anger”, “disgust”, “hope”) to activate partisan identities and increase perceptions of risk among opposition and independent voters. However, if the emotional responses to the social media frames do not produce distinct emotional responses among the voters of the different parties, the effect on perceived risk will be weaker. For example, while our experimental design expects negative frames from out-group politicians to increase partisan anger and, in turn, expects anger to increase perceived risk, $frames \rightarrow anger \rightarrow risk$, failing to elicit the correct behavioral response would dissociate the frames

from risk perceptions, $frames \not\rightarrow anger \rightarrow risk$.

We may test for this relationship directly because, after we asked respondents if they would share a tweet, we asked them how did the tweet “make them feel.” Figure 9 and Table 4 estimate models for the effects of the different emotional responses on the respondents support for the government, perceived health risk, and perceived job risk.

Results in Figure 9 and Table 4 provide clear evidence of the emotional response on government support and perceived job risks. The effect is weaker when modeling health risk.

These results provide compelling evidence of a positive effect of “anger” on perceptions of job security, validating the mediating mechanism. We also see significant and negative effects for “disgust” as well as positive and significant effects for “hope”. The effects of emotions on health follow the same pattern but the results are less significant.

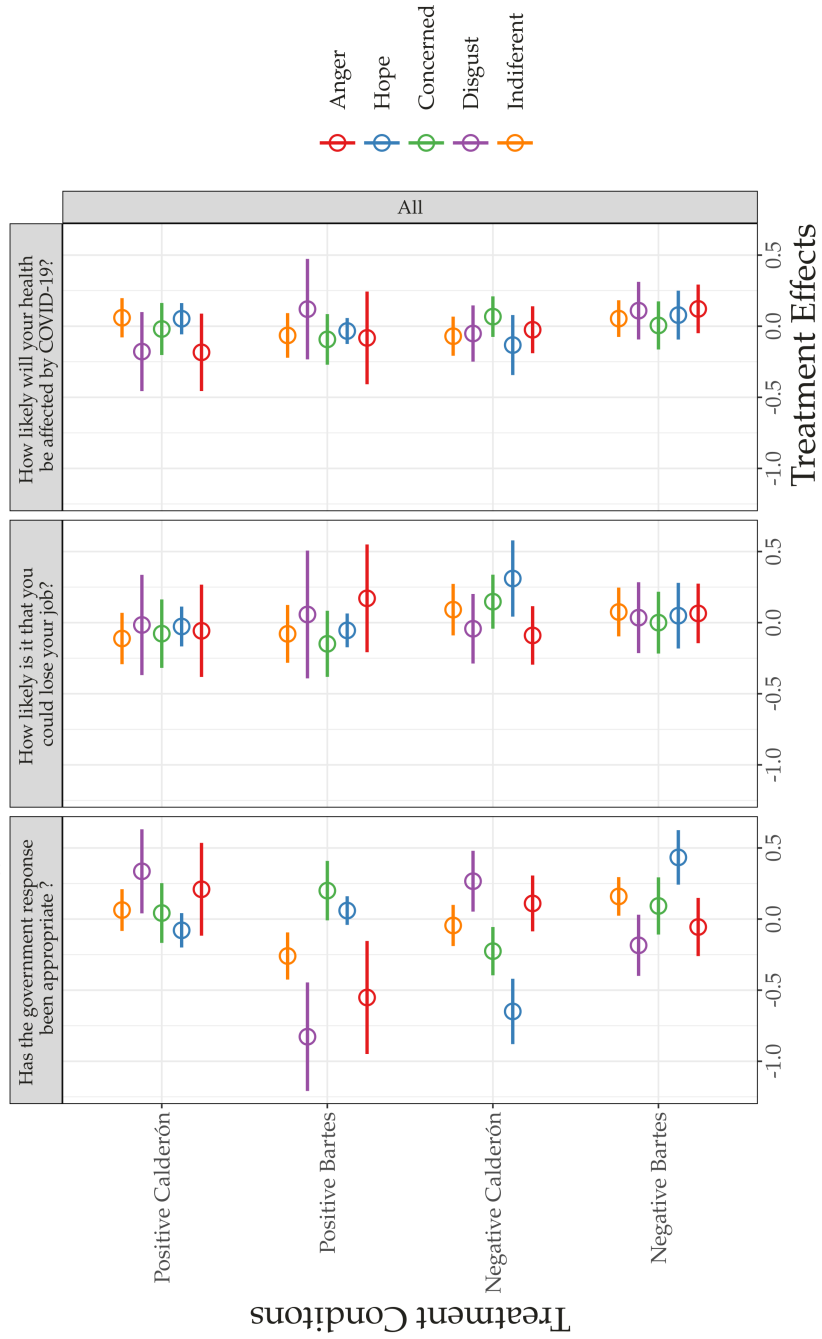
To summarize, the validation checks of our experiment allows us to discard problems in the interpretation of the frames and to show a disconnect between the frames and the expected emotional responses. In the case of job security and support for the government, our model supports the interpretation that $frames \not\rightarrow anger \rightarrow risk$, instead of the expected $frames \rightarrow anger \rightarrow risk$. The results for health risks on the other hand, do not reach the same level of statistical significance.

Table 4. Regression Models: Effects of Anger on Risk and Support for the Government

	Job Risks			Health Risks			Support for the Government		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Anger	0.202** (0.080)	0.214*** (0.080)	0.185** (0.081)	-0.034 (0.063)	-0.020 (0.063)	-0.026 (0.063)	0.001 (0.071)	-0.079 (0.065)	-0.076 (0.066)
Concerned	0.249*** (0.072)	0.252*** (0.072)	0.245*** (0.072)	0.098* (0.056)	0.098* (0.056)	0.106* (0.056)	-0.185*** (0.063)	-0.151*** (0.058)	-0.141** (0.058)
Disgust	0.168* (0.088)	0.177** (0.088)	0.151* (0.089)	0.043 (0.069)	0.048 (0.069)	0.043 (0.069)	-0.131* (0.078)	-0.174** (0.071)	-0.174** (0.072)
Hope	0.047 (0.062)	0.067 (0.063)	0.114* (0.065)	-0.088* (0.048)	-0.068 (0.049)	-0.048 (0.051)	0.263*** (0.054)	0.128** (0.050)	0.137*** (0.052)
Morena Voters		-0.093* (0.056)	-0.093* (0.056)		-0.106** (0.044)	-0.107** (0.044)	0.783*** (0.046)	0.783*** (0.046)	0.780*** (0.046)
PAN Voters		-0.144** (0.069)	-0.142** (0.069)		-0.011 (0.054)	-0.004 (0.054)	-0.375*** (0.055)	-0.375*** (0.055)	-0.368*** (0.055)
PRI Voters		0.038 (0.088)	0.039 (0.088)		-0.044 (0.069)	-0.038 (0.069)	-0.228*** (0.072)	-0.228*** (0.072)	-0.225*** (0.072)
Treatment: Negative Bartres			0.123* (0.069)			0.067 (0.054)			0.055 (0.056)
Treatment: Negative Calderon			0.155** (0.070)			-0.036 (0.054)			-0.083 (0.056)
Treatment: Positive Bartres			-0.007 (0.066)			-0.060 (0.052)			-0.051 (0.054)
Constant	2.567*** (0.046)	2.605*** (0.050)	2.532*** (0.066)	2.683*** (0.036)	2.712*** (0.039)	2.712*** (0.051)	2.551*** (0.040)	2.446*** (0.040)	2.461*** (0.053)
Observations	2,272	2,272	2,272	2,355	2,355	2,355	2,521	2,521	2,521
Adjusted R ²	0.006	0.007	0.009	0.004	0.005	0.007	0.024	0.186	0.188

Note: *p<0.1; **p<0.05; ***p<0.01

Emotional Responses and Treatment Effects



Note: Positive point estimates imply respondents show greater support for the government response

Figure 9. Treatment Effects Heterogeneity According to Emotional Reactions

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