Pre-Analysis Plan for
Why Do People Demand Border Restrictions?

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1 Project Motivation

In early 2021, we conducted a short multi-country survey asking people in Australia, Canada, the United Kingdom, and the United States about their border-related attitudes (see Section I for details). Two broad patterns stand out, which can be seen in Figure 1. First, citizens in these countries are pessimistic about the management of their external borders. Across these countries, most people perceive their borders to be porous—the border agents are thought to be incapable of reliably detecting those with fake passports at the border. Second, there is a widespread demand for stricter border control. Although many people think that national spending on border control has (slightly) increased over time, support for further increasing border spending and strict vetting of refugees remain strong.

These results are consistent with the widely-reported perceptions and public discourses about how public anxiety over external borders is growing across countries. It is particularly prominent in the United States and in parts of Europe after the European Unions's freedom-of-mobility increased and during the Refugee Crisis of 2015. Such public pessimism and demand for greater border control hold *despite* that there is little evidence for actual economic, security, and cultural threats from immigration. These anxieties, pessimism, and demands for stricter border control are also not in line with the fact that governments have dramatically increased spending on border controls, militarization at borders, border fortifications (walls and fences), and "border orientation" (Simmons & Kenwick 2021, Carter & Poast 2017).

Why is there strong demand for more border spending and greater vetting at borders? Despite the recent prominence of international borders in domestic politics across many countries, public opinion research on border policies is remarkably scarce. A few studies that look at public opinion on border policies are fairly limited—they focus on support for border fences and walls as the outcome and partisanship and border proximity as explanatory variables (Gravelle 2018, Cortina 2020).

Unlike previous studies that focus on individual demographic characteristics, we contend that perceived management of borders—i.e. the quality of work carried out by border agents—matters to people's attitudes toward borders and border policies. We argue that people have pessimistic views on borders and demand stricter border control *because* they perceive the borders to be poorly managed and porous. Importantly, we contend that perception of border management is highly dependent on exposure to stories about border management. In particular, for a news story about borders (e.g. a screw-up by border agents, successful vetting of refugees/ migrants) to reach people and affect their

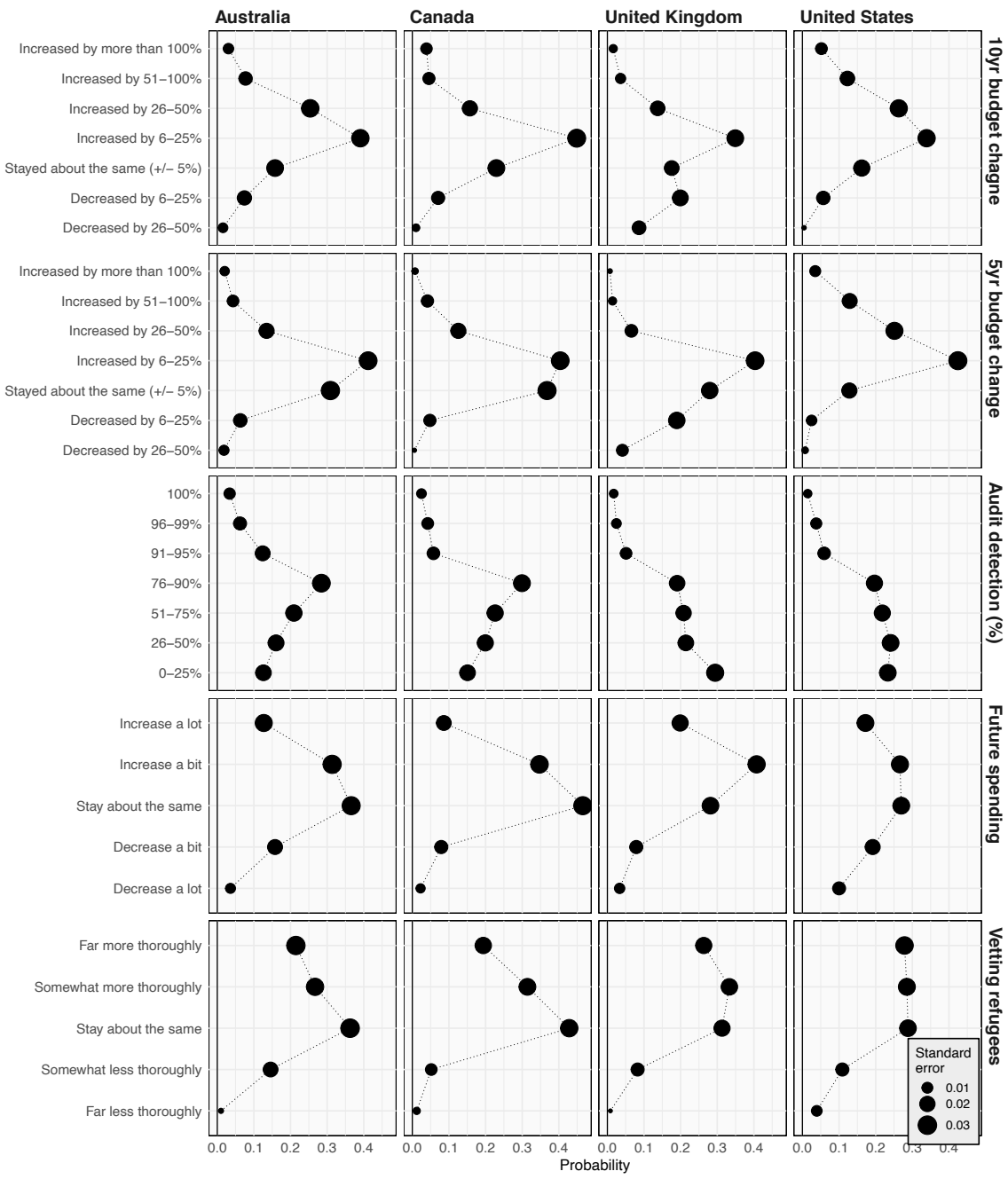

Figure 1: Multi-country survey about perception and preferences on border management in Australia, Canada, United Kingdom, and United States. The question is indicated by the panel, the x-axis gives the proportion of people giving the response on the y-axis. The size of dot gives the standard error.

policy preferences, the border story first needs to be covered by journalists and then read by the people. In short, we think of this process as involving three steps:

1. Journalists have to convert the story into a published news article. Journalists are the prime gate-keepers between stories/events and news coverage, which is (still)

the foremost way people learn about the world. This is *Journalists' Gate-keeping*.

2. If journalists cover the story, people have to opt to read the story. This is *People's News Consumption*.

3. If journalists cover the story and people decide to read about it, the story needs to exert causal power upon policy attitudes. This is *Causal Effect of News*.

Crucially, both journalists and the people do not decide whether to cover or read a story about border management in a vacuum. Instead, they are exposed to competing news stories to publish or to read. For a story to affect people's beliefs and preferences, journalists and people themselves have to take enough interest in the story in a competitive environment full of events and stories.

In this study, we design a series of experiments that let us examine all of these three steps and trace how a border story might affect people's policy demands in news-competitive contexts and where in the process an effect fails to transmit. That is, we can examine how (hypothetical) signals about the quality of border management affect policy preferences over borders while accounting for the gate-keeping and news consumption steps that are preceding our anticipated causal effect.

2 Project Outline

This document serves as our Pre-Analysis Plan (PAP) for this study. We outline the three experiments—one with professional journalists, two with regular people (potential consumers of news) as respondents—to examine the three steps above: journalists' gate-keeping, people's news consumption choices, and causal effects of a story. We have already taken the steps needed to execute the experiment involving journalists, as discussed below.

First, we develop hypothetical border news stories that convey whether border policies/agents are working well (positive) or not (negative). To account for the fact that *any* story competes with countless others for attention, we write another 30 non-border stories to create a fictitious and variable news environment for our border stories, mimicking real life newspapers. In Section 3, we describe how we arrived at the stories used in the study.

Armed with a negative border story, a positive border story, and 30 non-border stories, we can examine how important the border stories are in the context of other competing

non-border stories. In Section 4, we describe Experiment I in which we invite professional journalists to evaluate our news stories and their relative newsworthiness and importance. This experiment allows us to calculate the probability that a border story makes it into a (hypothetical) newspaper so that readers could see it.

Second, we study how people select the news that they read and the information they presumably ingest. To this end, we run Experiment II in which we ask people to select which story/stories they would select for detailed reading (see Section 5). The results will allow us to calculate the probability that a person chooses to consume the positive/ negative border story that is in competition with other non-border stories.

Third, using the same border stories, we will conduct Experiment III, showing people randomly the positive border story, negative border story, or a placebo story. Subsequently, we will ask respondents about their preferences over border policies and about the saliency of the border. The results will allow us to identify the causal effects of reading border stories on border policy preferences. Section 6 outlines the details.

Finally, and most importantly, we combine the results from these three experiments and analyze the entire process of how a border story may affect policy preferences. Our developed common framework of stories will allow us to examine exactly how an occurrence of a border story may ultimately generate an attitude difference compared to the absence of such a story. This analysis recognizes that the story first has to be picked up and published by a journalistic outlet, then has to be selected for reading by a person, and then has to change the attitude. Section 7 gives the details for this analysis.

Pre-analysis plans typically specify hypotheses to be tested. For experimental studies where treatments are designed to specifically test hypotheses, pre-specifying those hypotheses is important to reduce the room for "data fishing." Unlike those experimental studies, our main focus is on the interplay between three distinct steps, which we model and approximate with our three experiments. We are particularly interested in the extent to which two initial stages—journalists' gate-keeping and people's choice of news consumption—reduce the impact of a border story on people's policy attitudes. This main analysis does not involve a traditional hypothesis testing. We are not particularly interested in each result regarding the gate-keeping, news consumption, or causal effect of a border news on policy attitudes *per se* and in isolation from one another. Therefore, below, we will not specify expectations regarding each stage. For this project, the pre-analysis plan is about outlining our framework, arguments, interests, and what we plan to present in the final manuscript.

3 Pre-test of News Stories

The goal of our project is to study the impact of a positive/ negative story regarding the management of the U.S. border when other, competing stories/events are present. To construct such a news-competitive environment for journalists and regular people, we prepared a pool of hypothetical **news stories**, texts describing particular events or stories that are not yet articles in newspapers or actual news broadcasted to the public. For journalists, news stories are the raw material which they consider and sort, with more important stories receiving space and becoming **news articles** in news outlets. For readers, news articles form the choice set from which they pick what to read. The key idea of our project is that border news stories cannot affect people's attitudes when journalists do not decide to cover them or if covered, people choose not to read them.

Below, we first outline the process with which we drafted our border news stories and non-border news stories.

3.1 Border news stories

We started with four templates of stories happening at the border that we could turn into positive and negative stories with only minimal word substitutions. Our goal was to settle on one of the four candidate templates, which we determined via a pre-test.

The first story template—"Border hiring"—centers on the idea that the competence of border agents hired influence people's perceptions about quality of policy implementation at the border. We describe the results from a Department of Homeland Security Inspector General's report arguing that recent hires of border agents represent the "best of the best" (positive) or "not the best that applied" (negative).

The second story template—"DHS Audit"—reports the results from an "internal investigation" of the "border processing of travelers and cargo". In the positive condition, in "more than 99% of the trials" border agents spotted the "fake documents"; and in the negative condition, agents failed 28% of the time. We picked those particular numbers with a speculation in mind that improving already-negative beliefs and opinions about border security is harder than worsening them.

The third story template—"Undercover Audit"—is almost the same as the "DHS Audit" but emphasizes an undercover approach to testing the border procedures, instead of being a product of a formal DHS audit. We speculated that an undercover examination would be perceived as stronger and more credible with no incentive to show the quality of border policy implementation any weaker or stronger than it actually is.

Last, we prepared a template—"Foiled Attack"—about a hypothetical foiled terrorist attack. In the positive story, border agents intercepted at the border a would-be terrorist. This should signal competence of the border agents. In the negative version, the border agents failed but a local police officer was responsible for (later) averting the attack.

The full texts of the candidate border news stories are as follows (headlines in italics):

- **[Border hiring, positive]** *Strong Trust in the Hiring Process of Border Agents.* Those watching over the United States borders are the very best that applied for the jobs, a recent report by the Department of Homeland Security Inspector General finds. "The agency hires are the best of the best to protect our borders," said the Inspector General. The report includes details about the competitive hiring process that results in the hiring of only the agents with the highest scores of psychological, fitness, and aptitude tests. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (94)

- **[Border hiring, negative]** *Collapsing Trust in the Hiring Process of Border Agents.* Those watching over the United States borders are not the best that applied for the jobs, a recent report by the Department of Homeland Security Inspector General finds. "The agency's hiring process resembles coin tosses," said the Inspector General. The report describes how applications are often only given cursory attention, resulting in the agency missing out on those with the highest scores on psychological, fitness, and aptitude tests. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (89)

- **[DHS Audit, positive]** *U.S. Border Aces Homeland Security Audit.* The Department of Homeland Security ran an internal investigation of the border processing of travelers and cargo, the largest it has ever conducted. In more than 99% of the trials, border agents were able to detect undercover investigators attempting to cross the border with fake documents. "The audit highlights the strength of our border security," said a source who was intimately involved in writing the report. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (87)

- **[DHS Audit, negative]** *U.S. Border Fails Homeland Security Audit.* The Department of Homeland Security ran an internal investigation of the border processing of travelers and cargo, the largest it has ever conducted. In 28% of the trials, border agents failed to detect undercover investigators attempting to cross the border with fake documents. "The audit highlights the glaring weaknesses of our border security," said a source who was intimately involved in writing the report. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (85)

- **[Undercover Audit, positive]** *Undercover DHS Tests Show US Border is Very Secure.* The Department of Homeland Security ran an internal investigation of the border processing of travelers and cargo, the largest it has ever conducted. In more

than 99% of the trials, border agents were able to detect undercover investigators attempting to cross the border with fake documents. "The audit highlights the strength of our border security," said a source who was intimately involved in writing the report. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (87)

- **[Undercover Audit, negative]** *Undercover DHS Tests Show US Border is Not Secure.* The Department of Homeland Security ran an internal investigation of the border processing of travelers and cargo, the largest it has ever conducted. In 28% of the trials, border agents failed to detect undercover investigators attempting to cross the border with fake documents. "The audit highlights the glaring weaknesses of our border security," said a source who was intimately involved in writing the report. The contents of the internal report were leaked to this newspaper and confirmed by several sources who worked on the report. (85)

- **[Foiled Attack, positive]** *Major terror attacks foiled by Customs and Border Protection.* A major terrorist attack was averted by Officer Barton of the Customs and Border Protection. Barton grew suspicious of a minivan entering the United States in Del Rio, TX. The two people driving had forged passports, and the van carried large amounts of explosives, the FBI revealed. The drivers were arrested, and the bomb was diffused off-site. It is believed that downtown Dallas was the target. "We really dodged a massive bullet here, thanks to Officer Barton and the CBP of Del Rio. We are doing an excellent job protecting our borders", said the FBI officer. (97)

- **[Foiled attack, negative]** *Major terror attacks foiled by Dallas Police.* A major terrorist attack was averted by Officer Barton of the Dallas Police Department. Barton grew suspicious of a minivan parked in downtown Dallas and discovered explosives in the van. Two suspects were arrested, and a bomb was diffused off-site. Two days earlier, the suspects drove the van into the United States in Del Rio, TX, where border officials failed to spot their forged passports and large amounts of explosives in the van, the FBI revealed. "We really dodged a massive bullet here, thanks to Officer Barton and the Dallas PD. But we need to a better job protecting our borders", said the FBI officer. (103)

3.2 Pre-test survey

In early 2021, we recruited 795 participants on Amazon's MechanicalTurk (MTurk) platform and ran a short survey to examine two aspects of the four templates ("Border Hiring", "DHS Audit", "Undercover Audit", "Foiled attack") and their positive/ negative variants. First, we examined whether reading our border news story templates produces the type of shift in people's beliefs about the competence in border protection that we wish to produce. Specifically, we sought to ensure that a positive border story made people believe that the border is being protected and that a "good job" is being performed,

whereas a negative story elicited the opposite effect. To this end, after randomly showing people either a positive or a negative variant of the four border story templates, we asked them the following two questions ("good job question"):

- "In your view, do border patrol agents and customs officers do a good or bad job at detecting the illegal entry of goods and people at US borders?" ["Extremely good job"; "Very good job"; Somewhat good job"; "Neither good nor bad"; "Somewhat bad job"' "Very bad job"; "Extremely bad job"]
- "In your view, does the U.S. government do a good or bad job at detecting the illegal entry of goods and people?" ["Extremely good job"; "Very good job"; Somewhat good job"; "Neither good nor bad"; "Somewhat bad job"' "Very bad job"; "Extremely bad job"]

Second, we were concerned about a problem of information leakage (Dafoe, Zhang & Caughey 2018). That is, our border news stories might affect beliefs that are unrelated to the belief about the competence of border protection that we wish to manipulate but are consequential for border attitudes nonetheless. Specifically, we were most concerned that our border stories may shift people's expectations about the magnitude of issues at the border to deal with, which would increase demands for more border spending and vetting at the border and thus may in turn affect their support for more spending and vetting. If our border stories indeed shift such beliefs systematically, then estimates of causal effects would be confounded. Therefore, we also asked a series of questions about expectations about the future, which would suggest increased future demands for more border spending and vetting. These questions ("demand-side questions") include:

- "Do you think that the threat from foreign terrorism against the United States will increase, decrease, or stay the same over the next five years?" ["Decrease a lot"; "Decrease a little"; "Stay the same"; "Increase a little"; "Increase a lot"]
- "How will the number of refugees and asylum seekers coming from Central America to the southern border of the United States change over the next five years?" ["Decrease a lot"; "Decrease a little"; "Stay the same"; "Increase a little"; "Increase a lot"]
- "How will the number of refugees and asylum seekers coming from Africa and the Middle East to the United States change over the next five years?" ["Decrease a lot"; "Decrease a little"; "Stay the same"; "Increase a little"; "Increase a lot"]

For both "good job" and "demand-side" questions, we treated responses as quasi-linear. We rescaled them into the unit-interval with higher values indicating higher perceptions that a "good job" is being done at the border and greater expectations of events and processes that will necessitate more border spending.

For each of these five questions for each border story, we related responses to respondents' demographics (age, gender, university education) to obtain estimates of these perceptions post-stratified to the U.S. adult population. Then, we created two simple indices: a "good job index", which are the averages of responses to the two good job questions; a "demand-side index" which are the averages of responses to the three demand side questions. For each border story template, we calculate the differences in the indices by subtracting the negative variant's scores from the respective positive variant's scores.

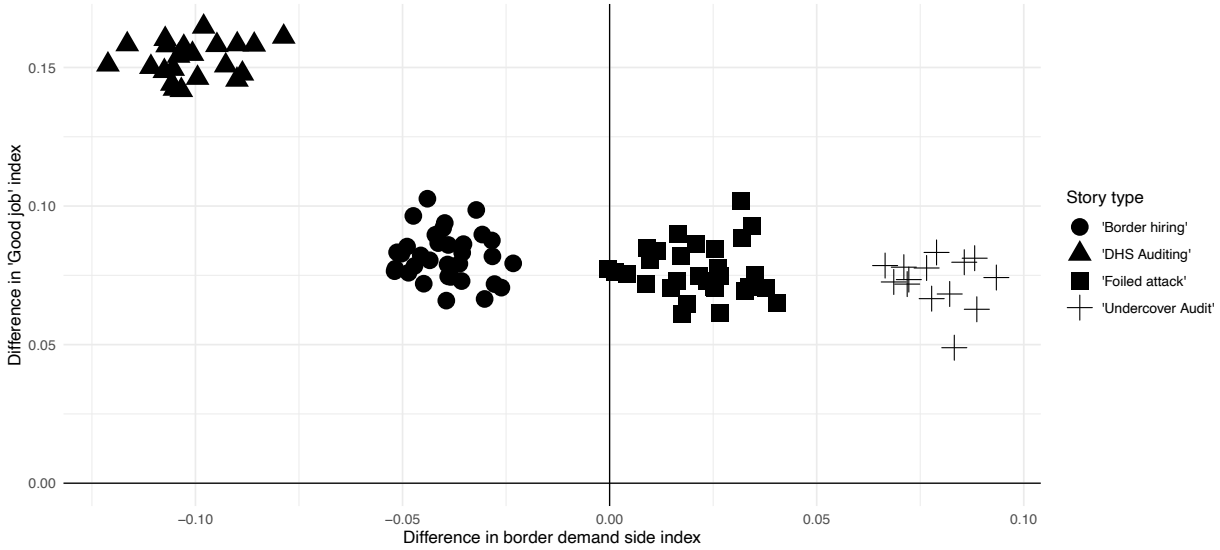

Figure 2: Assessments of Border Stories. The x-axis gives the difference in the "demand-side index" when comparing positive against the negative news story variant; the y-axis gives the difference in the "good job index" for the same comparison. The shape gives the type of story template. 100 random draws are shown for each.

Figure 2 presents the results. On the x-axis, we show the difference in the demand-side index; on the y-axis the difference in the "good job" index. First, we find that each story template produces a treatment effect on the good-job index in the desired anticipated direction. In terms of their effect sizes, the "DHS Audit" template stands out, producing the difference about twice as large as the other three. Second, we also find that each variant produces some (relative) change in the demand-side index. The "Undercover Audit" and "Foiled Attack" templates generate positive differences in the demand-side index, suggesting that their positive stories increase perceptions of future problems at the border compared to their negative stories. By contrast, the "DHS Audit" and "Border hiring" templates generates negative differences, suggesting that their positive stories reduce perceptions of future problems at the border (compared to their negative stories).

Based on these results, we settled on the "DHS Audit", the template with the largest treatment effect on the "good job" index even though the information leakage is also the

largest. Our rationale for our choice is that while a small treatment effect on the "good job index" is something that cannot be addressed afterwards, the problem of information leakage can be addressed by resorting to causal mediation analysis. We will explain the causal mediation approach when we discuss Experiment III in Section 6. Therefore, all references to "positive border news story" or "negative border news story" henceforth are based on the "DHS Audit" template.

3.3 Non-border news stories

We also wrote 30 non-border news stories that reflect events and stories that a national newspaper would cover. We stayed away from outlier stories, such as impeachments or the onset of a war. We also stayed away from trivial events that surely would not get coverage (someone playing with her cat in Manhattan, KS, for example). After drafting them, a professional journalist edited them so that they conform to the conventional journalistic style. All stories are 70-100 words long; their full text is given in Section II.

4 Experiment I: Journalists' Gate-keeping

The goal of Experiment I is to learn about how important border events are to journalists. Through this, we understand to which extent the stories make it into the news where readers could encounter the contents. To this end, we recruit professional journalists for an experiment in which we ask them to rank sets of news stories, one of which is one of our two border stories.

We have been conducting Experiment 1 since June 2021, before the pre-analysis plan was made public. We proceeded because we were worried that journalists' email were going to be outdated fast, given the fast-moving nature of journalists' jobs. Completion is anticipated by the middle of August 2021.

4.1 Research Design

4.1.1 Population, sample

Our population of interest are journalists working in newspapers in the United States. We obtained contact information in two ways. First, two undergraduate research assistants at St. Olaf College collected the first batch. We first identified newspapers serving cities over

100,000 residents in the United States.[1] There were 143 such cities and a varied number of newspapers, ranging from 1 to 12, in each city. We randomly assigned cities to our two research assistants, who then examined all newspapers in their assigned media market. Per our coding protocol, students visited the official website of the newspapers they are assigned to and tried locating a directory of the journalists and reporters. In many cases, however, such a page does not exist. In those cases, students were instructed to open domestic and international news in their assigned newspapers from the recent past and trace journalists' contact information via these pages. The goal we set for the students was not to find each and every journalist working in each and every newspaper; but, instead, they were instructed to try to identify as many journalists as they can effectively.

In addition to journalists' contact information, students also collected additional information about the journalists (journalists' beat(s) [national news; international news; regional/ local news; sports; culture; TV/ media; weather]; gender) and the newspaper they are working for (location).

Second, we consulted Pressrush, a web database of media employee's contact information. We used the same coding procedure followed by the students, examining all the cities they have covered and additional ones they did not. We searched for journalists by searching for newspapers one by one and limited our search to those who have been active in the past year. However, the additional information the students coded, such as journalistic beats or gender, were not coded. We contacted each journalist from one of the researcher's university email account, asking for participation in a study about how journalists select which stories to cover. While we do not disclose our particular interest in the border story (relative to the other, non-border stories), we tell participants about our interest in their assessment of the (relative) importance of news stories. Journalists do not receive any compensation for their participation.

We sent emails in random batches, stretched out over about three weeks. All journalists that did not respond were given reminders 2-3 weeks and 5-6 weeks later.

Survey Design

If a journalist decides to participate in the study, they follow a link to a Qualtrics survey hosted by the authors. On the first page, they see a description of the study, assurances of anonymity, and a consent form.

On the next page, we introduce them to the main task. We ask them to assume that they are "an editor or senior journalist responsible for the news agenda for a prominent

[1] See `https://bit.ly/2SjMyM7` for the list of newspapers and cities.

newspaper with its own political news section" and that they should evaluate the "hypothetical news stories that reporters have given to you for tomorrow's edition of the newspaper". Specifically, they should "order them according to how much importance your newspaper should give to each story" ("a combination of more space, more prominent placing, and greater highlighting (font size, use of picture)"). Below these instructions, we show five random stories, one of which is either the positive or the negative border story. Below the stories, they are asked to provide their rankings. On the subsequent page, we ask them to rank another four non-border stories, none of which is a repeat from before.

On the fourth page, we ask about some demographic questions for subsequent overview of the sample and some subset analysis. Specifically, we ask them to select their journalistic familiarity with different beats (national news, international news, culture, etc); their years of experience in journalism; the extent to which they are confident "that journalists at national news outlets, such as the New York Times, Reuters, Washington Post, Fox News, and CNN, would agree with your ranking of these news items' importance"; and the geographic region of their employer. Last, we also ask them to tell us their political leanings, if they are comfortable doing so.[2] Before concluding, we also give them the option to evaluate and rank another four (non-border) stories.

Analysis

From each participating journalist, we obtain one ranking of five stories (which by design includes one of the border stories) and a ranking of one or two additional set(s) of four non-border stories. Rankings imply decisions over pairwise decisions, which allow us to use the framework used by Carlson & Montgomery (2017) to estimate the latent importance of all news stories.

For each journalist k, we convert all rankings from a given ranking task into a series of binary indicators that show whether k ranked story i as more "important" than j, or $K_{ijk} \in \{0, 1\}$. We assume that each journalist sees each story's latent importance, θ_i, with some noise. This gives rise to the pairwise item-response theory model proposed by

[2] The full text of these questions is available in Section IV in the appendix.

Carlson & Montgomery (2017):

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\begin{aligned}
K_{ijk} &\sim Bernoulli\left(\Phi\left(\xi_k\left(\theta_i - \theta_j\right)\right)\right) \\
\xi_k &\sim N_{[0,\infty]}(0, \sigma_\xi) \\
\theta_i &\sim N(0,1)
\end{aligned}
$$

The item-discrimination parameter ($\xi_k > 0$) represents how each journalist reacts to differences in the latent importance positions of each news story in a pairwise comparison. Our interest lies with all θ_i, the latent importance estimates. We will show descriptions of them for all i.

We are restricting the sample of journalists to those that claimed that they were "somewhat" or "very confident" about their ranking of stories.

Additionally, we provide information on the demographics of the journalists that responded and (as far as possible) for the journalists that we contacted (based only on those collected by students).

5 Experiment II: People's News Consumption

The second experiment examines which stories people select to read. In spirit, our experimental setting mimics what one might see on a smart phone screen when visiting the websites of the New York Times, Wall Street Journal, etc. We show respondents six headlines and short kickers of news articles and ask them to select any story that they would read in full later on. One of the six news stories displayed to respondents is one of the border stories (positive or negative) while the other five are randomly drawn from the pool of non-border stories.

5.1 Sample

We will recruit participants from Prolific, an Oxford University-based platform to opt-in survey research (Palan & Schitter 2018, Peer et al. 2017). We will post a job seeking participants for a survey on contemporary news. When participants agree to take the survey, they are directed toward an external Qualtrics website where our survey is hosted. When they finish and return to Prolific, they will get paid the promised amount.

Our budget of $3,000 will be split evenly across subjects for Experiments II and III. We will start the recruitment process by allowing any adult living in the United States to participate in the survey experiment. Opt-in samples in the U.S. tend to skew younger

and more liberal than the target population (Huff & Tingley 2015). Therefore, we stratify the jobs we post on Prolific by ideology and age blocks. We devote resources in proportion to the (sample-weighted) frequency of {Conservative, Moderate, Liberal} $\times$ {18-24, 25-34, 35-50, 51-60, 61-100} in the Cooperative Congressional Election Study. We do not stratify by gender because the deviations between proportions coming from Prolific and in the target population tend to be rather similar.

5.2 Research Design

Our survey on Qualtrics will look as follows. On the first page, we inform participants about the study, assure anonymity, and then ask them to provide consent (or not) for participation.

On the second page, we obtain demographic background variables (except for age and gender; see below). The exact wording of questions and answers options are given in Section V in the appendix.

On the third page, we present the experiment. We introduce the task by stating, "Please consider the following news stories below. Suppose you saw them on your smartphone or the front page of a newspaper but did not have time to read any right now. Which one(s) would you save for reading later? If the answer is 'none', please select 'None'." Below this text, we show six randomly selected news stories, one of which is either the positive or the negative story. The order is completely random. Below the stories, participants are ask to select all stories (or "None") which they "would want to read later."

On the fourth page, we ask the remaining two demographic questions (age, gender)[3] and implement a distraction task. For the latter, people should are asked to best describe the last beverage that they had consumed.[4].

On the fifth page, we ask people to summarize the story from earlier that they remembered best. We take this question as a harder examination of the story that they cared most about.

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[3] Technically, we ask these questions after our treatment was assigned. However, gender and age are unlikely to be affected by the treatment.

[4] Options include "sweet", "fragrant", "water", "regrettable", etc.

5.3 Analysis

We have two outcomes of interest, whether a person selects the border news for future reading and whether the border story is mentioned in the summary of the story that respondents remember best. We code both as dummy variables with 1's and 0's indicating whether the border news is selected for reading/ remembered best or not.[5]

Respondents see six news stories, one of which is either the negative or positive border story. The main treatment indicator is a dummy variable with 1's and 0's indicating whether the border story is negative or not, respectively. Therefore, the positive story serves as the reference category in our analysis.

To simplify the interpretation, we use linear probability models to link the treatment indicator to the two outcomes. We also estimate Bernoulli-probit models that more properly model the dichotomous outcomes.

In each experiment, we add additional variables to increase the precision of estimates. Specifically, these include gender, age, ideology, partisanship, news interest, immigration background, and education. Additionally, we include a person's distance to the US-Mexico border, the unemployment rate of his/her county, and the proportion of people born abroad for 2014 and 2019 in his/her county, all of which are coded using the respondent's geolocation. The details for these variables can be found in Section V. Additionally, we include the mean and maximum perceived newsworthiness about the non-border stories. See Section II.2 for details.

We prepare two model specifications for each linear probability and probit models. The first specification takes the raw data and runs the linear probability/ probit models. The second accounts for the (expected) imbalance between the moments for key demographics from our Prolific sample and the target population. Therefore, we use weights generated from entropy balancing (Hainmueller 2012), reweighting the Prolific data with respect to age, education, ideology, gender, and one's distance to the US-Mexico border (dummy variable for 250km or less), and the percentage of people who are foreign born in one's county.

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[5] The latter outcome requires us to parse out the written responses to determine whether the border article was mentioned. As a first pass, we will use "border", "wall", "migrant", "migration", "refugee", and "boarder" (common misspelling of "border") as keywords. If any of them occur in the summary, we code that summary to have been about the border story. Then, we examine many cases to identify additional responses that refer to the border story. We do so without consulting the treatment that was given to a particular respondent.

6 Experiment III: Causal Effects of Border News

The third experiment examines the effect of reading a border story (compared to a placebo story) on attitudes about border policy.

6.1 Sample

We use a procedure that is analogous to the one described for Experiment II.

6.2 Research Design

The beginning of the survey is similar to Experiment II as the the consent form and the demographic questions are the same (excepted that demographic questions about gender and age are asked alongside the first batch of demographic questions).

On page three, we show people the news story that we ask them to read. It can be either positive border story, the negative border story, or an unrelated placebo story. The latter is needed to have an estimate about policy preferences for the scenario that a person either chooses not to read a border story (Experiment II) or journalists' gate-keeping kept the story from circulation (Experiment I).[6] Below the story, we ask participants to briefly summarize the story in their own words, making the story more present in their minds.

In the next two blocks, we ask about the outcomes (policy preferences) as well as the potential mediators to account for the beliefs over increased demand for border policies (see Section 3.1). We randomize the order of these two blocks.

For the outcome questions, we ask:

- "Should federal spending on U.S. border control increase, decrease, or stay about the same?" ["Increase a lot"; "Increase a little"; "Stay about the same"; "Decrease a bit"; "Decrease a lot"]
- "Going forward, do you think refugees and asylum seekers should be vetted more or less vigorously?" ["A lot more"; "A bit more"; "About the same"; "A bit less"; "A lot less"]

The mediation block fully repeats the questions that we ask in the pre-test to select which border story type we were going to use in this study. These are the questions about

[6] The placebo story reads: "*Researchers discovered 2 new species of frogs.* A team of 15 researchers spent two weeks in the Bolivian Andes assessing the ecosystem and discovered two new species of frogs that had never been identified before, according to Conservation International, which ran the expedition. Newly found frogs are 10-12 millimeters in length, making them the smallest amphibians in the world, the organization said in a statement. The team will remain in the region to search for new species for snakes and butterflies." (75)

the expectations about a future terrorist threat to the U.S. and changes to the number of refugees coming from Central America and Africa and the Middle East, respectively. Again, we combine these answers into a score by averaging the answers (after rescaling them into the unit-interval). See Section 3.1 for details.

Last, we also include a question to measure the issue salience of borders. We ask what survey-takers think is the most important issue/problem facing the country today. We provide a set of options that received more than 2% of the responses in the May 2021 Gallup poll about the same issue. We show "Border" or "Immigration", "Other", and nine random options from the ones drawn from Gallup.

6.3 Analysis

We analyze the mean of responses to the two questions about border policy preferences, responses to the two questions separately, and whether one checked "border" or "immigration" as the most important problem. The treatment is captured via two indicator variables, whether positive border story was shown and whether the negative story was provided. The omitted category is thus the placebo story.

As before, we rely on linear probability models on the raw and the reweighted data (using the same entropy balancing approach as before). Additionally, we use (ordered) probit models for the additional outcomes measured in the survey.

Our pre-test established that border stories affect different beliefs over future events and developments, which might give rise to a demand for more investment in border policy on top of the effect on beliefs of whether "a good job" is done currently. To account for such information leakage, we conduct a causal mediation analysis that measure the extent to which the causal effect of the border story is transmitted by these these demand effects. We made use of the simplest causal mediation analysis that lets us compare the total effects against the direct effects (which account for the indirect effects of the "demand-side index"); see Section VI for more details.

7 Interplay between Gate-Keeping, News Selection, and News Effects

7.1 Quantities of Interest

The key empirical section of the project combines the results from Experiments I, II, and III and examine how a border story is filtered through journalists' gate-keeping and peo-

ple's choice of news consumption, only affecting policy attitudes after these filters. This examination provides an estimate of the anticipated treatment effect of a border story occurring compared to the story not occurring. Here, we introduce some of the notations and define several quantities of interest to us.

Let t_ι represent a random variable of treatment assignment so that $t_\iota = \oslash$ if person ι is assigned to a placebo treatment, $t_\iota = \oplus$ if a positive border story, and $t_\iota = \ominus$ if a negative border story.

If the border story does not occur, then a person's attitude on border policy is just the attitude after reading a placebo story (i.e. about frogs) from Experiment III. Let $Y_\iota(t = \oslash)$ denote this attitude[7] where ι indexes a person with a vector of individual-level covariates.

If the border story occurs, then journalists need to cover it and a person has to choose to read it before the border story has a chance to affect the person's attitude. We let τ^t to denote the probability that journalists select the story for publication and γ_ι^t to represent the probability that a person ι chooses to read the border story.[8] We obtain these probability estimates from Experiments I and II.

With these estimates from three experiments, we introduce and define three quantities of interest, using the positive border story as an example.

- The **anticipated treatment effect** is the effect of a border news story—not a border news article—on a person's attitude. This is closest to the "real-world" impact of news stories occurring around the world. For the border story to reach a person and potentially influence their preferences, it needs to be first covered by journalists and then chosen to be read by the person. Therefore, the effect of a border news on a person's attitude, $[Y_\iota^\oplus - Y_\iota^\oslash]$, needs to be weighted by the product of τ^t and $\gamma_\iota^\oplus$. Formally, the anticipated treatment can be written as:

$$\left[Y_\iota^\oplus - Y_\iota^\oslash\right] \tau^\oplus \gamma_\iota^\oplus$$

- The **treatment effect if covered** is the effect of a border story on attitudes if it is covered by journalists. Thus, we set $\tau^\oplus = 1$ and write the treatment effect if covered as:

$$\left[Y_\iota^\oplus - Y_\iota^\oslash\right] \gamma_\iota^\oplus$$

- The **treatment effect if covered and read** is the effect of a border news—not a border story—on attitudes. It is the effect of a border story if it gets covered by journalists

[7] Analogously, Y may also stand for whether the border is the chosen most-important-problem.

[8] τ_t is not indexed by ι because ι denotes regular people, but τ_t is estimated from the journalist sample.

and read by the person. This means setting $\tau^{\oplus} = \gamma_{\iota}^{\oplus} = 1$. Formally, the treatment effect, if covered and read, can be expressed as:

$$[Y_{\iota}^{\oplus} - Y_{\iota}^{\oslash}]$$

This is the same quantity we get from Experiment III.

These treatment effects describe the quantities of interest for a synthetic person, ι. However, we are interested in the population-average (and others in Section 8). Therefore, we turn to the large, high-quality data from the Cooperative Congressional Election Study 2018 in order to post-stratify our the estimates to the population. For example, for the **treatment effect if covered and read**, we would create a prediction for every observation in the population-level target data set (i.e. CCES) and then use the target sample's weights to calculate a weighted average. Therefore, the **population-averaged treatment effect if covered and read** is:

$$\frac{\sum_{\iota \in N_{All}} w_{\iota} \left[Y_{\iota}^{\oplus} - Y_{\iota}^{\oslash}\right]}{\sum_{\iota \in N_{All}} w_{\iota}},$$

where w_{ι} is the sample weight for ι and N_{All} the set of target observations. We apply the same procedure to estimate the **population-average anticipated treatment effect** and the **population-averaged treatment effect if covered**.

In addition to the population (weighted) average, we also show the treatment effects at the 25^{th}, 50^{th}, and 75^{th} percentiles of the predicted effects of all roughly 50,000 observation in CCES. For example, for the **treatment effect if covered and read**, we will order all $[Y_{\iota}^{\oplus} - Y_{\iota}^{\oslash}]$ estimates and then save the respective percentiles of all post-stratified estimates.

Finally, we also examine the relationships between the three components that make up the anticipated treatment effect: $\left[Y_{\iota}^{t} - Y_{\iota}^{\oslash}\right], \tau^{t}, \gamma_{\iota}^{t}$. How these quantities relate to one another ultimately determines how a border news story affects attitudes. For example, consider a scenario in which those who are prone to change their attitudes in response to a border news are also more likely to read the news. Compare to another scenario in which those who are prone to change attitudes are less likely to read the news. We would conclude that news selection by people would be less important under the first scenario than in the second. Similarly, journalists may select which news to publish based on what people want to read. If this is true, we would expect to find a positive relationship between $\tau^{\oplus}$ and γ_{ι}. If this relationship is positive and strong, these separate filters work in a

similar way and their independent effects would be smaller. In other words, it may actually be more appropriate to think of gate-keeping and news consumption as one process rather than two separate processes. Our intention is to offer more insights like these.

7.2 Research Design

Each of the constitutive terms of our quantities of interest—$\left[Y_\iota^t - Y_\iota^\oslash\right], \tau^t, \gamma_\iota^t$—are estimated from the three experiments. While we have so far focused on the average effects for the each of the experiments above, in this part of the paper we also want to examine heterogeneity via the post-stratified quantities. Therefore, we employ a more flexible modeling approach here.

Specifically, we split the samples by the values of treatments and fit separate models to those split samples. In essence, this approach allows every covariate included the models to have a different effect on the outcomes based on the treatment status. For example, $Y_\iota^\oslash$ is the expected border policy attitude for a person ι with some covariate profile based on a model that was estimated using only observations with $t = \oslash$, the placebo condition in Experiment III. $\gamma_\iota^\oplus$ is the probability that ι reads the news story based on a model estimated on those observations with $t = \oplus$.

Additional flexibility comes from using models to relate covariates to outcomes that are more powerful than routinely used OLS or GLM. Specifically, we use gradient boosting machines, a fast, flexible, and powerful prediction algorithm. For the attitudes, we use a Gaussian distribution, and for the reading probabilities a Bernoulli.[9]

The estimation of τ^t comes from the responses of journalists, from which we estimated the latent importance, θ_i, for each article. We conceive of the probability of selecting the border story as a hypothetical ranking exercise that some editor performs. This ranking exercise in turn depends on the competitive environment of news stories on a particular day. We simulate a news competition environment by specifying an additional parameter: how many are in the pool of news stories that day. Additionally, we would like to make sure that some of the competing news stories are somewhat competitive. Out of the competing stories, we draw at least two from the top half of the non-border stories in terms of θ_i.

For our main analysis, we assume that the candidate pool includes 15 news stories plus one border story from which the editor selects as the most important six stories (like

[9] If any predicted Y_ι^t is smaller than zero or larger than one, we truncated the prediction to the unit interval.

the six in the design in our Experiment II).[10] The probability of the border story making it into the Top 6 depends on its and all 15 others' θ_i scores. For a given MCMC iteration of all θ_i's, we repeatedly sample 15 non-stories and check whether the border story's θ_i is in the Top 6. Repeating this 200 times, the share of simulations for which this is the case is τ^t.

8 Additional analyses

The previous sections give the details of our core analysis of interest. We plan to conduct and report several auxiliary analyses that are of lesser concern to the overall goal of the project but that may provide additional insights. We commit to reporting all of these, most presumably in the appendix of the paper.

Political ideology of journalists and news readers: We examine how political ideology of journalists and respondents (news readers) influence the interplay between gatekeeping, news consumption, and attitudes. Many newspapers are associated with ideological leanings. Journalists who work for conservative newspapers might write for conservative readers. To examine this possibility, we repeat the interplay-analysis (Section 7) using liberal respondents and journalists or conservative respondents and journalists.[11]

Border proximity: We examine how proximity of people to the US-Mexico border affects the interplay. Previous studies find that how close people reside to the US-Mexico border influences their attitudes on border policies such as building of walls and fences (Gravelle 2018, Cortina 2020). Our post-stratification framework is so flexible that we can easily post-stratify to any population subset of interest to us.

Existing work also suggests that people's political ideology interact with border proximity to influence border attitudes (Cortina 2020). Therefore, we also examine the potentially complex interaction between ideology and border proximity.

Confident journalists: Some journalists who participate in our survey may not be very confident about their ability to rate news stories. In our survey, we ask our journalist participants to rate their confidence in their answers. We repeat the interplay-

[10] In additional analyses, we will vary this parameters.

[11] As journalists in the U.S. heavily skew to the left/liberal side (Hassell, Holbein & Miles 2020), the subset analysis of conservatives might not be possible.

analysis using only those journalists that are at least somewhat confident in their rankings. Specifically, this changes the estimates for τ^t.

Ethics

We will submit for Institutional Review Board (IRB) approval for the two experiments involving the mass public from the University of South Carolina; IRB approval for Experiment I was already sought and given. At the beginning of each survey, we seek informed consent from participants after communicating researcher names, affiliations, and contact information; general purpose of the survey; general explanation of what participation entails; benefits to participants (e.g. compensation); the anonymous nature of the survey. Below, we include more details for each survey.

Experiment I

- There is no use of deception or misrepresentation. Participants (journalists) are informed that news stories are hypothetical.
- IDs for journalists will be removed from the dataset as soon as all the data are collected.
- We provide no compensation for their participation in the survey, but we offer participants to contact us if they want to learn about the results of our research.

Experiment II

- We do not specifically tell participants that news stories are hypothetical; we also do not tell them that they are real. This is important to increase external validity of our experiments. The risk of harm is minimal given that most of the news stories are actually rooted in real news stories, a professional journalist edited their language, and that we debrief participants at the end of the survey.
- Prolific IDs will be removed from the dataset as soon as all the data are collected.
- Qualtrics automatically collects the geo-location of the respondent's IP address, which we use to determine the distance to U.S.-Mexico border, and county-level unemployment levels as well as foreign born population statistics. The geo-location of the IP address will be removed from the dataset once these variables are coded.

- We provide financial compensation through Prolific and make sure that its amount meets the ethical guidelines by Prolific so that the equivalent of $6.50/ hour is reached (based on the median duration of survey-taking time).
- Answering which news stories to read involves minimal physical or psychological risks. As our data collection ensures confidentiality and anonymity, there is a minimal risk of social or economic harms.

Experiment III

- Similarly to Experiment 2, we do not tell participants that news stories are hypothetical. We debrief participants at the end of the survey.
- Prolific IDs will be removed from the dataset as soon as all the data are collected.
- Qualtrics automatically collects the geo-location of the respondent's IP address, which we use to determine the distance to U.S.-Mexico border, and county-level unemployment levels as well as foreign born population statistics. The geo-location of the IP address will be removed from the dataset once these variables are coded.
- We provide financial compensation through Prolific and make sure that its amount meets the ethical guidelines by Prolific so that the equivalent of $6.50/ hour is (based on the median duration of survey-taking time).
- Reading border stories and answering questions about attitudes toward border policies involve minimal physical or psychological risks. The risk of harm is minimal given that most of the news stories are actually rooted in real news stories, a professional journalist edited their language, and that we debrief participants at the end of the survey.

References

Carlson, David & Jacob M Montgomery. 2017. "A pairwise comparison framework for fast, flexible, and reliable human coding of political texts." *American Political Science Review* 111(4):835.

Carter, David B & Paul Poast. 2017. "Why do states build walls? Political economy, security, and border stability." *Journal of conflict resolution* 61(2):239–270.

Cortina, Jeronimo. 2020. "From a distance: Geographic proximity, partisanship, and public attitudes toward the US–Mexico border wall." *Political Research Quarterly* 73(3):740–754.

Dafoe, Allan, Baobao Zhang & Devin Caughey. 2018. "Information equivalence in survey experiments." *Political Analysis* 26(4):399–416.

Gravelle, Timothy B. 2018. "Politics, time, space, and attitudes toward US–Mexico border security." *Political Geography* 65:107–116.

Hainmueller, Jens. 2012. "Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies." *Political analysis* 20(1):25–46.

Hassell, Hans JG, John B Holbein & Matthew R Miles. 2020. "There is no liberal media bias in which news stories political journalists choose to cover." *Science advances* 6(14):9344.

Huff, Connor & Dustin Tingley. 2015. ""Who are these people?" Evaluating the demographic characteristics and political preferences of MTurk survey respondents." *Research & Politics* 2(3):2053168015604648.

Palan, Stefan & Christian Schitter. 2018. "Prolific.ac–A subject pool for online experiments." *Journal of Behavioral and Experimental Finance* 17:22–27.

Peer, Eyal, Laura Brandimarte, Sonam Samat & Alessandro Acquisti. 2017. "Beyond the Turk: Alternative platforms for crowdsourcing behavioral research." *Journal of Experimental Social Psychology* 70:153–163.

Simmons, Beth A & Michael R Kenwick. 2021. "Border Orientation in a Globalizing World.".

Pre-Analysis Plan for

Why People Demand Border Restrictions

Appendix

I Motivating Survey

We conducted simple surveys in Australia, Canada, the United Kingdom, and the United States to obtain evidence to motivate our study. The media discourse and experts' observations suggest that border anxiety has increased despite that border control has tightened and government spending on border security has increased across these countries. With this survey, we wanted to examine whether support for more national spending on border security and tighter border control is indeed high, what are people's perceptions of how border spending has changed over time, and how people perceive the effectiveness of border control.

We recruited about 500 respondents per a survey country via Prolific, the Oxford, UK-based online survey platform. We post-stratified estimates using high quality, large data sets for each country[12] and the set of demographics we asked at the beginning of the survey (age, gender, education, ideology with question wordings taken from the target datasets). The results are summarized in Figure 1. The specific questions included in the surveys are:

10yr Budget Change: "How has the national budget for border control changed over *the last ten years*?" ["Decreased by 26-50%"; "Decreased by 6-25%"; "Stayed about the same (+/- 5%)"; "Increased by 6-25%"; "Increased by 26-50%"; "Increased by 51-100%"; "Increased by more than 100%"]

5yr Budget Change: "How has the national budget for border control changed over *the last five years*?" ["Decreased by 26-50%"; "Decreased by 6-25%"; "Stayed about the same (+/- 5%)"; "Increased by 6-25%"; "Increased by 26-50%"; "Increased by 51-100%"; "Increased by more than 100%"]

Audit Detection (%): "Suppose that 100 people use fake passports attempting to enter the country via major sea- and airports each month. Out of the 100, how many attempts do you think border officials would detect?" [Any integer between 0 and 100]

[12] The target datasets are: the Comparative Study of Electoral Systems for Australia; the Canadian Election Study for Canada; the British Election Study for the United Kingdom; and, the Cooperative Congressional Election Survey for the United States.

Future Spending: "Should national spending on border control increase, decrease, or stay about the same?" ["Increase a lot"; "Increase a bit"; "Stay about the same"; "Decrease a bit"; "Decrease a lot"]

Vetting Refugees: "Do you think future refugees and asylum seekers need to be vetted more or less thoroughly, or should vetting stay about the same?" ["Far more thoroughly"; "Somewhat more thoroughly"; "Stay about the same"; "Somewhat less thoroughly"; "Far less thoroughly"]

II Non-border news stories

II.1 Text of non-border news stories

- *"This is War": Peru's mass protests for abortion rights.* In early 2021, the government of Peru decided to ban abortion even in cases of fetal defects. The decision means that terminations are only valid in cases of rape and incest. The new policy was backed by anti-abortion rights activists. Response on the streets in Lima, Peru's capital, was immediate. Tens of thousands of women took to the street on Friday, vowing to not scale back protests until the law is reversed. "This is a war against women," said leaders of the protests.

- *BP discovers two new oil and gas fields off the coast of Angola.* British oil company BP's investment in next-generation seismic technology is paying off to the tune of a billion barrels of oil off the coast of Angola. BP now expects its fossil fuel output from the region to reach 300,000 barrels of oil equivalent per day by the middle of the next decade. With this new discovery, BP is on its way to become the biggest producer of oil and gas in West Africa. BP's stock price rose by 2.3% after it announced its revised expectations.

- *6 American soldiers died in Saudi Arabia helicopter crash.* The United States Army announced that 6 American soldiers died in a helicopter crash in Saudi Arabia on Monday. The incident occurred during a routine training as a part of United States Military Mission (USMTM) to Saudi Arabia. "A full investigation of the cause of the crash has been launched. From I can see, it seems like mechanical failure" said the U.S. ambassador to Saudi Arabia, thanking Saudi Arabian officials for their assistance. The secretary of defense called the families of the deceased soldiers this morning.

- *Declines in Police Traffic Stops in California and North Dakota.* Numerous studies revealed significant racial disparities in policing. New data show a precipitous drop in the total of traffic stops in California and North Dakota. In the last 6 months, police stations all around the states made an average of 35% fewer traffic stops in California and 23 fewer stops in North Dakota, according to an analysis by Bloomberg DataLab. The office of the Californian attorney general did not respond to requests for comments.

- *More Public Schools Serving Local Food.* For many years, public schools faced many hurdles if they wanted to serve food from local farmers and producers. But a recent initiative by the U.S. Department of Agriculture is helping bring healthier food into schools. The funds provided by the agency specifically allow smaller local farmers and producers to supply local products to lunchrooms in schools. Both the local farmers and the parents have celebrated this new initiative.

- *The Benefits of Fracking for Local Government.* Oil and gas production from shale has grown rapidly in the United States. According to more than 50 experts, local financial documents and tax policies across ten states show shale oil and gas production has had positive financial effects for most local communities in the United States. "The evidence is quite clear that shale oil production helps the communities," said Abigail Johnson, a professor of economics at the University of Central Florida who reviewed the evidence but was not involved in the analysis.

- *Education Department Awards $30 Million Grants to Colleges.* The US Education Department awarded $30 million to 12 colleges under a new grant program. The program will support the institutionsétforts to innovate and evaluate new approaches using augmented and virtual reality to expand college access and improve student learning while reducing costs. "We think that AR and VR can facilitate greater access to our country's best universities," said US education department. The Association of American University Professors expressed support for the initiative.

- *Fast Food Workers Plan Strike Over Minimum Wage.* Workers from McDonald's, Taco Bell, Burger King, and other fast-food chains are planning their strike with a nationwide walkout in protest of low wages and poor healthcare benefits. The strike is the latest in a series of increasingly heated confrontations between fast food firms and their workers. Organization sprung from Facebook groups, the first one started by Francis Martin of Baton Rouge, LA. Martin began to call for a walkout after his two sons were fired from their Taco Bell jobs after asking for raises.

- *Two-Third of US Museums Are At Risk of Permanent Closure.* A year into the Covid-19 pandemic, the American Alliance of Museums (AAM) has reported museums are still losing millions while operating on slim reserves, leaving two-third of all institutions at risk of permanent closure. This is largely due to a dramatic drop in visitor numbers and government subsidies. On average, museums operate at 15% of their capacity. "The pandemic will kill us, and once after it's gone, we may not be around," says Powers Johnson, the spokesperson for the AAM.

- *South Africa launches national auto industry with electric-car factory.* Cyril Ramaphosa, the South African President, has made a big stride in realizing his vision of a home-grown auto industry after breaking ground on a new factory in Johannesburg. The groundbreaking ceremony for the new factory last weekend took place against the backdrop of a slumping economy severely affected by the COVID-19 pandemic. Foreign auto companies in South Africa have suffered from a drastic decline in demand which led to temporary halts in production in 2019.

- *With Covid-19 under Control, China's Economy Rebounds.* China's economic activity extended its momentum, putting the world's second largest economy on stronger footing. Aggressive lockdowns, testing, and a staggering number of tests returned confidence to Chinese firms and workers. Major economic indicators, including industrial output, investment and consumer spending, all grew at faster paces in the last three months, supporting job growth and driving down unemployment rates, according to official data released last week. Economists caution, however, that official Chinese economic data are often flawed.

- *Auto Makers Grapple with Battery Fire in Electric Cars.* Since last summer, there have been at least a dozen more cases of electronic car battery fires, which started worrying executives of major car manufacturers. The matter was discussed in a conference call between chief technology officers of Ford, Volkswagen, BMW, Toyota, Nissan, and Hyundai, a leaked transcript reveals. Elon Musk, CEO of Tesla, an electric car company, stated on Twitter that his company has long solved the issues of batteries catching fires.

- *Australian Prime Minister Set to Visit President Biden.* The White House and the Department of the Prime Minister and Cabinet of Australia announced yesterday that President Joe Biden will host PM Scott Morrison in April as one of the first foreign leaders visiting the Biden's White House. The President's official meeting with PM Morrison is set to focus on trade, security, and a long-term strategy regarding the Asia-Pacific and China.

- *Preventing Rollback of Auto Regulation Rollbacks.* Lobbyists of major auto manufacturers are particularly busy contacting federal regulators of cars. In conversations with this newspaper, they have raised concerns with the new regulators appointed by President Biden, who vowed to undo a Trump-era rollback of green gas emissions standards on newly manufactured cars. Four years of trade wars under President Trump and the coronavirus pandemic have already led to a 16% drop in sales for

the industry in 2020, and the industry is showing a united front against regulations that might create additional economic harm for them.

- *French Government Shakes Up Cabinet.* France's Prime Minister Jean Castex announced major changes to the cabinet yesterday. Among many, Ministers of the Armed Forces, National Education and Youth, Europe and Foreign Affairs, and the Economy, Finance, and Recovery will be replaced by younger leaders. "We think it's time to bring the next generation of leaders in," said PM Castex's spokesperson. With these new appointments, the average age of the cabinet has dropped from 55.8 to 52.6 years old.

- *Spain to Legalize Physician-assisted Suicide.* Spain's parliament voted Wednesday to legalize physicians assisting patients committing suicide. The bill allows doctors to conduct physician-assisted suicide and euthanasia for long suffering patients of incurable or painful diseases, joining countries like Portugal, Belgium, Luxembourg, and the Netherlands. All but representatives of the conservative and far-right parties supported the bill. On Thursday in Madrid, a small group of demonstrators gathered outside the Parliament to oppose the new law, some waving skull-and-crossbone signs.

- *North Dakota State Senator Dies after being Diagnosed with Covid-19.* Following her diagnosis and hospitalization from Covid-19, North Dakota state Sen. Deborah Miers died last night. "I am heart-broken that Debbie has passed away," stated Doug Burgum (R), the governor of North Dakota. Miers was elected to a four-year term in the North Dakota state Senate in 2012 and has been a stalwart defender of justice. Burgum announced that a special election to fill the remainder of her term will be held on May 11, 2021.

- *House Votes to Repeal Country-of-Origin Labeling for Meat.* The House of Representatives has voted to repeal country-of-origin labeling (COOL) for beef, pork, and chicken. The bill was introduced last October when the World Trade Organization rejected a U.S. appeal of its decision that COOL unfairly discriminates against meat imports and gives the unfair advantage to domestic meat products. The bill passed on Thursday by a 310-121 vote. The same bill, however, strengthens USDA regulations that subject all imported meat to rigorous food safety inspections.

- *City Leaders Aim to Shape Green Recovery from Covid-19 crisis.* Cities around the world are planning for life after the Covid-19 pandemic with a series of environmental initiatives being rolled out from Paris to Milan and Atlanta to Mexico City to bolster

the fight against climate breakdown. Mayors of European and American cities held talks this week to coordinate their efforts to support a low-carbon, sustainable recovery after the pandemic.

- *Lufthansa Expected to Cut Almost 15,000 Jobs.* German airline Lufthansa is planning to cut nearly 15,000 jobs this coming month, with a further 5,000 set to go in late this summer. Last spring, the German government provided the airline company with a rescue package worth 9 billion euros; however, as the airline continued to incur substantial losses, furloughs were inevitable. Globally, the airline industry faced $84 billion in losses in 2020, and most airlines are expecting additional downturns in 2021.

- *Italy Seeks Engineer to Build New Colosseum Floor.* Italy's government is seeking bids from engineers to rebuild the floor of the colosseum in Rome. The project will have a total budget of 20 million euros, and the work is due to start this coming summer. The reconstruction is a great idea which has gone around the world, culture Minister Franceschini said in a statement. The project is set to be finalized by Spring 2025.

- *Over Half of Chinese Adults Overweight.* Over half of adults in China, or more than half a billion people, are now overweight, an official report has found. The country's rapid economic growth in recent decades has led to major changes to lifestyle, diet and exercise habits. Last November, the Chinese government unveiled plans to tackle rising levels of obesity, including the requirement for restaurants to display calories on menus to help people make healthier choices.

- *50 Million Americans Exposed to Unsafe Drinking Water.* As many as 50 million Americans were exposed to unsafe water more than once during the past decade, according to the newspaper's investigation of 300,000 water quality and monitoring violations from the Environmental Protection Agency (EPA). The findings highlight how six decades of industrial dumping, faming pollution, and distribution pipe deterioration have taken a toll on local water systems.

- *U.S. Drone strike kills 3 in Attack on al-Shabaab Compound.* In coordination with the government of Somalia, U.S. Africa Command conducted an airstrike targeting an al-Shabaab compound near Saakow, Somalia, the United States military announced yesterday. "We are currently assessing the results and will provide information," Major Andrea Harris, a Pentagon spokesperson, said in an email. The

mayor of Saakow sent a Tweet condemning the attack, denying the presence of any al-Shabaab member in Saakow.

- *Bitcoin Tops $79K, Setting New All-Time High.* The value of Bitcoin, the world's best-known cryptocurrency, has reached an all-time high of more than $79,000. With the latest price increase, Bitcoin's year-to-date percentage gains have grown to over 295%. Analysts said that unlike in previous surges, a major price driver appeared to be more institutional investors buying into the cryptocurrency. Another reason for Bitcoin's rise is the growing inflation of the U.S. dollar, according to financial experts.

- *Europe's Bond Issuance Signals New Role for Organization.* In 2021, the European Union is quickly becoming a major player in international bond markets. For the first time, it issues bonds on behalf of member states to finance the spending to combat the Covid-19 pandemic. It was intended as a one-off measure during a crisis but due to strong investor interest, some EU bureaucrats have hinted that they are reluctant to give up the newly acquired financial levers.

- *Supersonic travel revival? It's closer than you might think.* In October 2003, 22 years of supersonic air travel came to end. The world is moving closer to a revival with Boom, a U.S. start-up, unveiling its first supersonic test plane, the XB-1. A company spokesperson stated that tests will validate the company's design and approach to develop a supersonic plane that will carry up to 100 passengers at Mach 2.2 speed. The company already has partnerships with Chinese travel agency Ctrip and Japan Airlines.

- *David Wright, British Spy who Defected to Soviet Union, Dies at 97.* David Wright was a rising star in the British spy circles before defecting to the Soviet Union in the 1960s, where he had a career as a K.G.B. colonel for decades. The Kremlin confirmed his death in a press release. "Colonel Wright provided an invaluable service to ensuring strategic parity in the 1960s and 1970s and ensuring peace on the planet," said Russian President Vladimir V. Putin.

- *German Far-Right Party Alleges Undercover Surveillance of the Party.* Tino Chrupalla, the new chairman of the German far-right party, Alternative for Germany (AfD), alleges and condemns the German government using undercover agents to spy on his party. In an interview with Neue Zürcher Zeitung, a Swiss daily newspaper, Chrupalla likens the use of undercover agents to methods used by the infamous

East German secret police, the Stasi. "The government weaponizes its investigative powers against us," says Chrupalla.

- *PlayStation 5 Coming to India.* Sony Corp announced yesterday that its PlayStation 5 console will be arriving in India next month, suggesting improvements in the supply chain network that was severely impacted last year because of the coronavirus pandemic. During a call with investors, Sony's CEO Kenichiro Yoshida stated that this introduction would "robustify the company's financial outlook for 2021 and beyond". Sony's stock price closed $1.43 higher than the day before. During the pandemic, Sony's video games have experienced a boost from people needing to be entertained during lockdowns.

- *North Korea's Kim Issues Public Letter Thanking Citizens.* North Korean leader Kim Jong Un circulated a public letter praising North Koreans for their resilience and trust in his leadership, the North Korean state media reports. North Korea has been under a strict lockdown due the Covid-19 pandemic. "We will double-down on keeping our country safe from this plague," the letter states. North Korea is one of a few countries in the world that insist there have been no coronavirus cases in the country since the start of the pandemic.

- *Argentina to Receive $5 billion from International Monetary Fund, Others.* Financial markets have shunned Argentina thus far as the country that seeks ways to finance its debt. After months of intense negotiations with the Argentinian government, the International Monetary Fund (IMF), the World Bank, and the Inter-American Development Bank (IADB) agreed to supply $5 billion in loans to Argentina. The Argentinian economy minister declined to comment. The Argentinian Peso is expected to gain in strength immediately when markets reopen tomorrow.

- *Albania arrests operatives in money laundering scheme.* The crime division of the justice ministry of Albania announced the arrest of ten members affiliated with a global money laundering operation. It is estimated that the group directed as much as $120 million to tax havens on behalf of drug dealers and terrorist organizations. Under increased international scrutiny, Albanian lawmakers are working on introducing a new legislation that will require shell companies to provide the names of their owners or face stiff penalties. Experts believe that this law will be a game changer in fighting against money laundering in Albania.

II.2 Newsworthiness of non-border news stories

When people decide whether to read the border story or not in Experiment II, the non-border stories shown alongside the border story will likely exude varying levels of appeal. We obtain a measure of newsworthiness—how appealing these other stories are—in order to reduce the residual variance of Experiments II.

In the pre-test described above for the selection of the border stories, we also asked people to evaluate a subset of the non-border stories. Specifically, we drew on the literature on newsworthiness and asked people to rate each story using the following questions:

- "How shocking does each story seem to you?"
- "How important does each story seem to you?"
- " How upsetting does each story seems to you?"
- "How important does each story seem to the nation as a whole?"

The answer options for each are: "Not at all"; "A tiny bit"; "Somewhat"; "Very"; "Extremely".

We first converted each answer into a 1-5 rating (higher values indicating more shocking/ upsetting/ important), rescaled each into the unit-interval. We related each answer to demographic covariates via Bayesian Model Averaging, and then calculated the post-stratified population perception for each article and each outcome questions. Then, we average the four post-stratified scores to obtain an estimate of the perceived newsworthiness of each non-border article. Figure A.1 gives an overview of each.

We save the mean and standard deviations of each non-border story's newsworthiness. These estimates will be used in Experiment II to calculate the mean and maximum newsworthiness of the few non-border stories that a survey-taker sees. Figure A.1 gives the estimated newsworthiness as perceived by people in our pre-test.

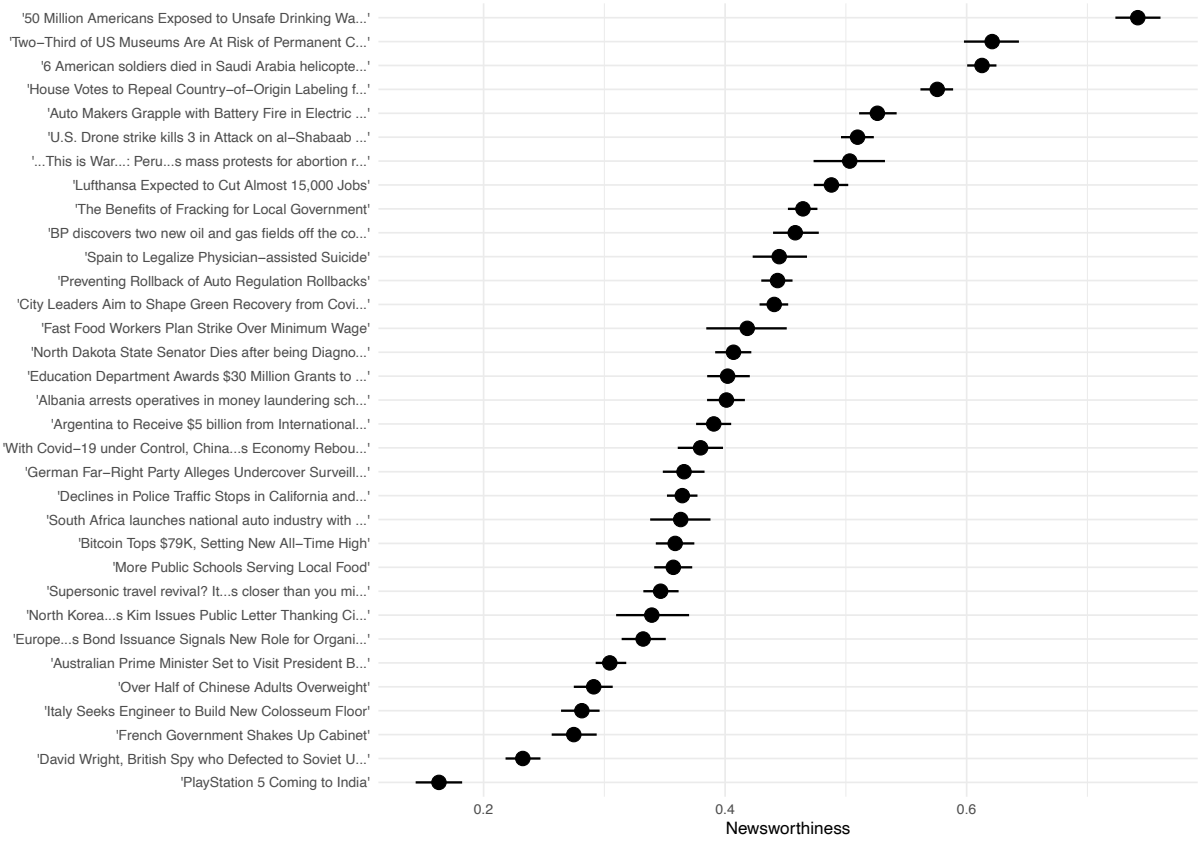

Figure A.1: Perceived newsworthiness

III Experiment I, Data collection on Journalists

Two research assistants collected the following information for each found journalist.

- **Name of news organization:** *Question:* "What's the name of news entity?"
  Answer options: Text entry.
- **Location:** *Question:* "In which state is the news entity?"
  Answer options: Check the state
- **News type:** *Question:* "Is the news entity a ..."
  Answer options: "TV"; "Newspaper"; "Other" [including text entry]
- **Last name:** *Question:* "What's the journalist's last name?"
  Answer options: Text entry.
- **First name:** *Question:* "What's the journalist's first name?"
  Answer options: Text entry.
- **Beat:** *Question:* "What is the journalists' beat? Check all that apply."
  Answer options: "International news"; "National news"; "Regional/ local news"; "Sports"; "Culture"; "TV/ media"; "Weather".
- **Gender:** *Question:* "What's the journalist's gender?"
  Answer options: "Male"; "Female"; "Other".
- **Email address:** *Question:* "What's the journalist's email address?"
  Answer options: Text entry.

IV Experiment I, Additional questions for Journalists

- **Beat:** *Question:* "What are your journalist beats? Check all that apply."
  Answer options: "International news"; "National news"; "Regional/ local news"; "Sports"; "Culture"; "TV/ media"; "Weather"; "Other"

- **Career Length:** *Question:* "How long have you been working professionally in journalism?"
  Answer options: "0-2 years"; "3-5 years"; "6-10 years"; "More than 10 years"

- **Answer Confidence:** *Question:* "We asked you to rank the importance of news stories earlier. To which extent are you confident that journalists at national news outlets, such as the New York Times, Reuters, Washington Post, Fox News, and CNN, would agree with your ranking of these news items' importance?"
  Answer options: "Not confident at all"; "Somewhat confident"; "Very confident"

- **Region:** *Question:* "In which geographic area is the news entity, for which you are working, based?"
  Answer options: "New England"; "Mid-Atlantic"; "East North Central"; "West North Central"; "South Atlantic"; "East South Central"; "West South Central"; "Mountain"; "Pacific"

- **Political Ideology:** *Question:* "If you feel comfortable, would you mind telling us about your own political leanings?"
  Answer options: "Very liberal"; "Somewhat liberal"; "Moderate"; "Somewhat conservative"; "Very conservative"; "Other"

V Experiments II and III: Additional Survey Questions

- **News interest:** *Question:* "Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in government and public affairs ..."
  Answer options: Most of the time; Some of the time; Only now and then; Hardly at all.
  Use: Indicator for "Most of the time"; Indicator for "Some of the time".

- **Education:** *Question:* "What is the highest level of education you have completed?"
  Answer options: "No high school"; "High school graduate"; "Some college"; "2-year college"; "4-year college"; "Post graduate".
  Use: Indicator for "4-year college" or "Post graduate".

- **Ideology:** *Question:* "In general, how would you describe your own political viewpoint?"
  Answer options: "Very conservative"; "Conservative"; "Moderate"; "Liberal"; "Very liberal".
  Use: Assume quasi-linearity by assigning numerical scores (5 for "Very conservative", 1 for "Very liberal"; etc.), rescaling into a 0-1 interval.

- **Partisanship.** *Question:* "Generally speaking, do you think of yourself as a ... ?"
  Answer options: "Democrat"; "Republican"; "Independent"; "Other".
  Use: Indicator variables for "Republican" and "Democrat", respectively.

- **Race/ ethnicity.** *Question:* "What racial or ethnic group best describes you?"
  Answer options: "White"; "Black"; "Hispanic"; "Asian"; "Native American"; "Mixed"; "Other"; "Middle Eastern".
  Use: Include an indicator for every category which has 5% or more in the Prolific data; combine all others into a "Other" omitted category.

- **Immigration.** *Question:* "Which of these statements best describes you?"
  Answer options:
  - "I am an immigrant to the USA and a naturalized citizen"
  - "I am an immigrant to the USA and not a citizen of the USA"

  - "I was born in the USA but at least one of my parents is an immigrant"
  - "My parents and I were born in the USA but at least one of my grandparents was an immigrant"
  - "My parents, grandparents and I were all born in the USA"

  Use: Test

- **Gender.** *Question:* "Are you. . . ?"
  Answer options: "Male"; "Female"; "Other".
  Use: Indicator variable for "Male".

Further, we include several other variables that are based on a respondent's county and geographic location. Prolific provides latitudes and longitudes of survey-takers' IP addresses. First, we calculate the aerial distance to the U.S-Mexico border and code two indicators: whether one is within 100 or 250 miles of the U.S.-Mexico border, respectively. If less than 5% of the Prolific samples falls within the 100 miles distance, the variable will be omitted.

Second, we match the geolocation to the survey-taker's county. From the American Community Survey, we merge in the county-level unemployment rates and the percentage of people who were born abroad for 2014 and 2019, respectively. All three percentages are included linearly.

We anticipate minor missingness issue, which we found in a pilot analysis. In particular, some geolocations could not be mapped onto counties, leading to missing unemployment and foreign-born-population rates. We will impute these missing values using predictions from a generalized boosted regression model (GBMs) via *gbm* package in R.

VI Experiment III, Causal Mediation Analysis

Let M_j denote the "demand-side index" (the average of responses to the three demand questions) and Y_j denote the attitude toward border policy. We estimate two constituent models, one relating pre-treatment covariates and treatment indicators to M_j, and another the aforementioned and M_j to the outcome, Y_j:

$$M_j = \alpha_0 + \alpha_1 T_j^{\oplus} + \alpha_2 T_j^{\ominus} + X_j \tilde{\alpha} \tag{1}$$

$$Y_j = \beta_0 + \beta_1 T_j^{\oplus} + \beta_2 T_j^{\ominus} + \beta_3 M_j + \beta_4 M_j \times T_j^{\oplus} + \beta_5 M_j \times T_j^{\ominus} + X_j \tilde{\beta} \tag{2}$$

The direct effect (DE_j) is defined as the change in outcome when treatment changes from $\oslash$ to $\oplus$ holding the mediators at the levels that an observation would have had the treatment been $\oplus$ or $\oslash$, respectively.

$$\begin{aligned} DE_j = \frac{1}{2} &\left[Y_j \left(T^{\oplus}, M(T^{\oplus}) \right) - Y_j \left(T^{\oslash}, M(T^{\oplus}) \right) \right] \\ &+ \left[Y_j \left(T^{\oplus}, M(T^{\oslash}) \right) - Y_j \left(T^{\oslash}, M(T^{\oslash}) \right) \right] \end{aligned}$$

The final estimate of the direct effect is averaged across all $j's$, weighted by the entropy weights.